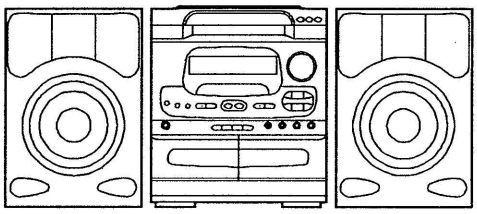
aiwa

aiwa SERVICE

# NSX-520

SERVICE MANUAL



COMPACT DISC STEREO SYSTEM

- BASIC TAPE MECHANISM : 2ZM – 3 PR1
- BASIC CD MECHANISM : KSM – 2101ABM
- TYPE HE,HM,HR,LH

| SYSTEM | CD – CASSEIVER | REMOTE CONTROLLER | SPEAKER |
|---|---|---|---|
| NSX – 520 | CX – N520 | RC – TN520 | SX – FN520 |

S/M Code No. 09 – 945 – 053 – 60T

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# SPECIFICATIONS

## TUNER/AMPLIFIER

**<FM section>**

| | |
|---|---|
| **Frequency range** | 87.5 MHz to 108 MHz |
| **Usable sensitivity (IHF)** | 1.3 μV (75 ohms) 13.2 dBf |
| **Alternate channel selectivity** | 50 dB (±400 kHz) |
| **Signal-to-noise ratio** | STEREO: 70 dB<br>MONO: 76 dB |
| **Harmonic distortion** | 0.3 % (MONO), 1 kHz<br>0.5 % (STEREO, L-R), 1 kHz |
| **Frequency response** | 30 Hz to 15 kHz (+0.5 dB, – 3 dB) |
| **Stereo separation** | 33 dB at 1 kHz |
| **Antenna** | 75 ohms (unbalanced) |

**<AM (MW) section>**

| | |
|---|---|
| **Frequency range** | CX-N520 HE, HM, HR:<br>AM 531 (530) kHz to 1602 (1710) kHz<br>CX-N520 LH:<br>AM 530 (531) kHz to 1710 (1602) kHz |
| **Usable sensitivity** | 350 μV/m |
| **Selectivity** | 22 dB (9 kHz) |
| **Signal-to-noise ratio** | 53 dB (100 dB input) |
| **Antenna** | Loop antenna |

**<SW section> (except LH model)**

| | |
|---|---|
| **Frequency range** | SW 1: 3.2 MHz to 7.3 MHz<br>SW 2: 9.5 MHz to 21.85 MHz |
| **Antenna** | Wire antenna |

**<Timer section>**

| | |
|---|---|
| **Program timer** | On-timer, free setting |
| **Sleep timer** | Setting in 10-minute increments, 240 minutes maximum |

**<Amplifier section>**

| | |
|---|---|
| **Power output** | 50 W + 50 W<br>(6 ohms, T.H.D. 10% 1 kHz) |
| **Harmonic distortion** | 0.05 % (15 W, 1 kHz, 6 ohms) |
| **Input terminal** | VIDEO/AUX: 150 mV (adjustable)<br>MIC: 1.8 mV/10 kΩ |
| **Output terminal** | SUPER WOOFER: 1.55 V |

## CASSETTE DECK/COMPACT DISC PLAYER

**<Cassette deck section>**

| | |
|---|---|
| **Track format** | 4 tracks, 2 channels |
| **Frequency response** | $CrO_2$ tape: 50 – 16000 Hz<br>Normal tape: 50 – 15000 Hz |
| **Signal-to-noise ratio** | 60 dB (DOLBY NR ON, $CrO_2$ tape peak level) |
| **Tape speed** | 4.8 cm/sec. (1⅞ ips) |
| **Recording system** | AC bias |
| **Erasure system** | AC erase |
| **Motor** | DC servo motor × 1 |
| **Heads** | Playback head × 1 (deck 1)<br>Recording/playback/erasure head × 1 (deck 2) |

**<CD player section>**

| | |
|---|---|
| **Disc** | Compact disc |
| **Scanning method** | Non-contact optical scanner (semi-conductor laser) |
| **Laser** | Semiconductor laser (λ = 780 nm) |
| **Rotation speed** | Approx. 500 rpm – 200 rpm (CLV) |
| **Error correction** | Cross Interleave, Reed Solomon code |
| **No. of channels** | 2 channels |
| **D-A conversion** | 16-bit linear |
| **Wow/flutter** | Unmeasurable |
| **Signal-to-noise ratio** | 90 dB (1 kHz, 0 dB) |
| **Harmonic distortion** | 0.05% (1 kHz, 0 dB) |

## SPEAKER SYSTEM

(These values are for one speaker.)

| | |
|---|---|
| **Cabinet type** | 3 way, bass reflex with surround speaker (magnetism sealed type) |
| **Speaker** | 130 mm (5⅛ in.) cone type woofer<br>80 mm (3¼ in.) cone type tweeter<br>50 mm (2 in.) ceramic type super tweeter<br>80 mm (3¼ in.) surround speaker |
| **Impedance** | 6 ohms<br>Surround speaker: 16 ohms |
| **Music power** | 50 W |
| **Output sound pressure level** | 88 dB/W/m |
| **Dimensions (W × H × D)** | 206 × 302 × 260 mm<br>(8⅛ × 12 × 10¼ in.) |
| **Weight** | 3.8 kg (8.4 lbs.) |

## COMMON SECTION

| | |
|---|---|
| **Power requirements** | AC 120 V/220 V/240 V, switch-able 50/60 Hz |
| **Power consumption (System total)** | CX-N520 HE, HM, LH: 105 W<br>CX-N520 HR: 140 W |
| **Dimensions (W × H × D)** | Main unit:<br>260 × 305 × 340 mm<br>(10¼ × 12⅛ × 13½ in.)<br>System:<br>672 × 305 × 340 mm<br>(26½ × 12⅛ × 13½ in.) |
| **Weight** | Main unit:<br>7.5 kg (16.5 lbs.) (HE, HM, LH models)<br>7.9 kg (17.4 lbs.) (HR model)<br>System:<br>15.1 kg (33.3 lbs.) (HE, HM, LH models)<br>15.5 kg (34.1 lbs.) (HR model) |

- Design and specifications are subject to change without notice.
- Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
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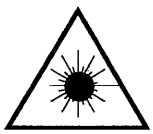
- The word "BBE" and the "BBE symbol" are trademarks of BBE Sound, Inc.
  Under license from BBE Sound, Inc.

# PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

**WARNING!!**
WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserståling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

**VAROITUS!**
Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

**VARNING!**
Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

**CAUTION**
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

**ATTENTION**
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

**ADVARSEL!**
Usynlig laserståling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

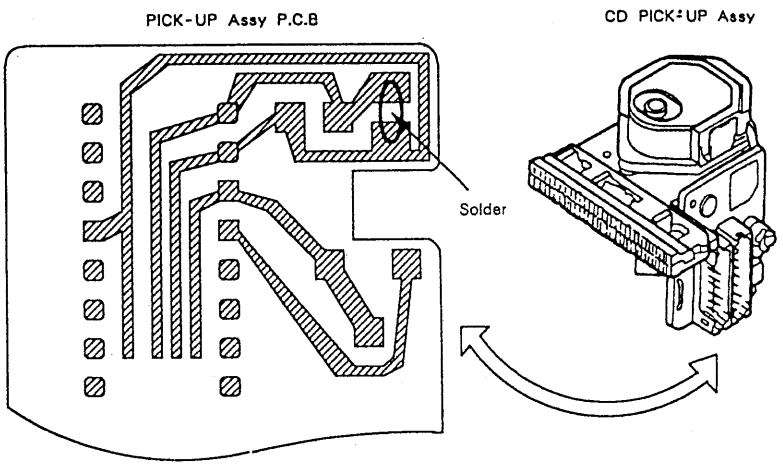
This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

| | |
|---|---|
| CLASS 1 | LASER PRODUCT |
| KLASSE 1 | LASER PRODUKT |
| LUOKAN 1 | LASER LAITE |
| KLASS 1 | LASER APPARAT |

## Precaution to replace Optical block (KSS – 210A)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure to ground body and workbench, and use care the clothes do not touch the diode.

1) After the connection, remove the solder shown in the right figure.



# ELECTRICAL MAIN PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

| REF. NO | PART NO. | ｶﾝﾘ NO. | DESCRIPTION |
|---|---|---|---|
| IC | | | |
| | 87-017-745-010 | | IC, CXA1782BQ |
| | 87-020-454-010 | | IC, DM6851 |
| | 87-017-486-080 | | IC, BA6397FP |
| | 87-017-586-010 | | IC, CXD 2518Q |
| | 87-017-194-010 | | IC, PLT104 |
| | 83-NF5-635-010 | | IC, LC866432V-5492〈HR〉 |
| | 83-NF5-646-010 | | IC, LC866432V-5506〈HE, HM, LH〉 |
| | 87-017-585-080 | | IC, NJM4580E |
| | 87-017-373-010 | | IC, NJH32H380A |
| | 87-001-582-010 | | IC, STK4152-2 |
| | 87-017-738-010 | | IC, NJM2068LD |
| | 87-001-982-010 | | IC, TA7291S |
| | 87-017-674-010 | | IC, XR1090 |
| | 87-002-727-010 | | IC, NJM4558L |
| | 87-017-375-080 | | IC, TC4094BF |
| | 87-001-874-010 | | IC, HA12134A |
| | 87-017-673-010 | | IC, BA3837 |
| | 87-017-449-010 | | IC, XR-1071CP |
| | 87-001-607-080 | | IC, NJM4558M |
| | 87-017-374-010 | | IC, TC4094BP |
| | 87-002-247-010 | | IC, BU4052B |
| | 87-017-448-010 | | IC, GD4052B |
| | 87-002-272-080 | | IC, TC4052 BF |
| | 87-001-376-010 | | IC, LC7218 |
| | 87-017-714-010 | | IC, LA1836 |
| | 87-002-872-080 | | IC, MC14053 BF |
| | 87-017-309-010 | | IC, M65830P |
| TRANSISTOR | | | |
| | 89-110-154-080 | | TR, 2SA1015Y |
| | 87-026-463-080 | | TR, 2SA933S(RS) |
| | 89-113-187-080 | | TR, 2SA1318TU |
| | 87-026-233-080 | | C-TR, DTA114TK |
| | 87-026-211-080 | | C-TR, DTA144EK T147 |
| | 89-213-702-010 | | TR, 2SB1370E |
| | 87-026-609-080 | | TR, KTA1266GR |
| | 87-026-610-080 | | TR, KTC3198GR |
| | 89-327-125-080 | | C-TR, 2SC2712GR |
| | 89-332-665-080 | | TR, 2SC3266GR |
| | 89-111-625-080 | | C-TR, 2SA1162GR |
| | 89-333-266-080 | | C-TR, 2SC3326B |
| | 87-026-232-080 | | C-TR, DTA144WK |
| | 87-026-210-080 | | C-TR, DTC144EK T147 |
| | 89-213-293-080 | | TR, 2SB1329R〈HE, HM, LH〉 |
| | 89-318-154-080 | | TR, 2SC1815Y |
| | 89-333-317-080 | | TR, 2SC3331T |
| | 87-026-213-080 | | C-TR, DTC114YK |
| | 87-026-226-080 | | C-TR, DTA143EK |
| | 89-503-655-680 | | FET, 2SK365GR, BL |
| | 87-026-224-080 | | C-TR, DTC143XK |
| | 89-109-521-080 | | TR, 2SA952K |
| | 89-112-965-080 | | TR, 2SA1296GR |
| | 89-406-555-080 | | TR, 2SD655E |
| | 89-502-464-080 | | FET, 2SK246Y |
| | 87-026-462-080 | | TR, 2SC1740S (RS)〈HE, HM, HR〉 |
| | 87-026-214-080 | | TR, DTA114YS |
| | 87-026-215-080 | | TR, DTC114YS〈HE, HM, HR〉 |
| | 89-327-143-080 | | C-TR, 2SC2714 (O) |
| | 89-503-025-080 | | C-FET, 2SK302 GR |
| | 89-320-011-080 | | TR, 2SC2001K〈HE, HM, HR〉 |
| | 89-505-434-580 | | C-FET, 2SK543(4/5) |
| | 89-318-155-080 | | TR, 2SC1815GR〈HE, HM, HR〉 |
| DIODE | | | |
| | 87-002-564-080 | | DIODE, 1SS133 RA |
| | 87-017-447-010 | | DIODE, GBU4DL |
| | 87-002-608-080 | | DIODE, DSF10TC |
| | 87-017-011-080 | | DIODE, LT IN4003L |
| | 87-020-691-080 | | DIODE, 1SS132 T-72 |
| | 87-020-027-080 | | C-DIODE, 1SS184 |
| | 87-020-125-080 | | C-DIODE, 1SS181 |
| | 87-020-465-080 | | DIODE, ISS133 |
| | 87-017-174-080 | | ZENER, HZS11A3L |
| | 87-017-147-080 | | ZENER, HZS33-2 |
| | 87-001-731-080 | | ZENER, HZS6C2L |
| | 87-017-091-080 | | ZENER, HZS5C1 |
| | 87-020-331-080 | | C-DIODE, DAN202K |
| | 87-001-290-080 | | ZENER, HZS6B1L |
| | 87-020-330-080 | | C-DIODE, DAP202K |
| | 87-001-559-080 | | DIODE, ISS131(T-72) |
| | 87-017-083-080 | | ZENER, HZS4C2 |
| | 87-017-092-080 | | ZENER, HZS5C2〈HE, HM, HR〉 |
| MAIN C.B | | | |
| C101 | 87-016-055-090 | | CAP, E 3300-42 HI-R |
| C102 | 87-016-055-090 | | CAP, E 3300-42 HI-R |
| C103 | 87-010-390-090 | | CAP, E 3300-25 SME |
| C104 | 87-010-235-080 | | CAP, E 470-16 SME〈HE, HM, LH〉 |
| C104 | 82-188-648-080 | | CAP, E 470-16(105)〈HR〉 |
| C105 | 87-010-381-080 | | CAP, E 330-16 SME |
| C106 | 87-010-430-080 | | CAP, E 100-63 |
| C107 | 87-010-392-080 | | CAP, E 33-35 SME |
| C108 | 87-010-406-080 | | CAP, E 22-50 SME〈HE, HM, LH〉 |
| C108 | 87-010-392-080 | | CAP, E 33-35 SME〈HR〉 |
| C109 | 87-010-263-080 | | CAP, E 100-10 |
| C112 | 87-010-237-080 | | CAP, E 1000-16〈HE, HM, LH〉 |
| C112 | 87-010-271-080 | | CAP, E 1000-16(105)〈HR〉 |
| C113 | 87-010-403-080 | | CAP, E 3.3-50 SME |
| C115 | 87-016-247-080 | | C-CAP, 0.1-50 F |
| C116 | 87-012-140-080 | | C-CAP, S 470P-50 CH |
| C118 | 87-016-247-080 | | C-CAP, 0.1-50 F |
| C119 | 87-018-205-080 | | CAP, TC-U 0.022-25 F |
| C120 | 87-018-205-080 | | CAP, TC-U 0.022-25 F |
| C121 | 87-018-211-080 | | CAP, TC-U 0.01-50 F〈HE, HM, HR〉 |
| C121 | 87-018-209-080 | | CAP, TC-U 0.1-50 F〈LH〉 |
| C122 | 87-018-134-080 | | CAP, TC-U 0.001-16 Y〈HE, HM, HR〉 |
| C123 | 87-018-134-080 | | CAP, TC-U 0.001-16 Y〈HE, HM, HR〉 |
| C124 | 87-018-134-080 | | CAP, TC-U 0.001-16 Y〈HE, HM, HR〉 |
| C152 | 87-010-374-080 | | CAP, E 47-10 |
| C213 | 87-010-404-080 | | CAP, E 4.7-50 SME |
| C214 | 87-010-404-080 | | CAP, E 4.7-50 SME |
| C215 | 87-010-182-080 | | C-CAP, S 2200P-50 B |
| C216 | 87-010-182-080 | | C-CAP, S 2200P-50 B |
| C217 | 87-010-404-080 | | CAP, E 4.7-50 SME |
| C218 | 87-010-404-080 | | CAP, E 4.7-50 SME |
| C219 | 87-010-185-080 | | C-CAP, S 3900P-50 B |
| C220 | 87-010-185-080 | | C-CAP, S 3900P-50 B |
| C221 | 87-010-400-080 | | CAP, E 0.47-50 SME |
| C222 | 87-010-400-080 | | CAP, E 0.47-50 SME |
| C223 | 87-010-260-080 | | CAP, E 47-25 SME |
| C224 | 87-010-260-080 | | CAP, E 47-25 SME |
| C225 | 87-010-260-080 | | CAP, E 47-25 SME |
| C226 | 87-010-260-080 | | CAP, E 47-25 SME |
| C227 | 87-012-368-080 | | C-CAP, S 0.1-50F |
| C228 | 87-012-368-080 | | C-CAP, S 0.1-50F |
| C229 | 87-012-361-080 | | C-CAP, S 0.056-25 Y |
| C230 | 87-012-361-080 | | C-CAP, S 0.056-25 Y |
| C236 | 87-010-408-080 | | CAP, E 47-50 SME |
| C243 | 87-010-154-080 | | C-CAP, S 10P-50 CH |
| C244 | 87-010-154-080 | | C-CAP, S 10P-50 CH |
| C245 | 87-010-194-080 | | C-CAP, S 0.047-25 F |
| C250 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C303 | 87-012-155-080 | | C-CAP, S 180P-50 CH |
| C304 | 87-012-155-080 | | C-CAP, S 180P-50 CH |

| REF. NO | PART NO. | カンリ NO. | DESCRIPTION |
|---|---|---|---|
| C305 | 87-010-189-080 | | C-CAP, S 8200P-50 B |
| C306 | 87-010-189-080 | | C-CAP, S 8200P-50 B |
| C309 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C310 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C311 | 87-010-213-080 | | C-CAP, S 0.015-25 B |
| C312 | 87-010-213-080 | | C-CAP, S 0.015-25 B |
| C313 | 87-010-197-080 | | C-CAP, S 0.1-25 B |
| C351 | 87-012-154-080 | | C-CAP, S 150P-50 CH |
| C352 | 87-012-154-080 | | C-CAP, S 150P-50 CH |
| C353 | 87-012-145-080 | | C-CAP, S 270P-50 CH |
| C354 | 87-012-145-080 | | C-CAP, S 270P-50 CH |
| C355 | 87-012-154-080 | | C-CAP, S 150P-50 CH |
| C356 | 87-012-154-080 | | C-CAP, S 150P-50 CH |
| C357 | 87-010-189-080 | | C-CAP, S 8200P-50 B |
| C358 | 87-010-189-080 | | C-CAP, S 8200P-50 B |
| C361 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C362 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C363 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C364 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C401 | 87-010-402-080 | | CAP, E 2.2-50 SME |
| C402 | 87-010-402-080 | | CAP, E 2.2-50 SME |
| C405 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C406 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C409 | 87-010-181-080 | | C-CAP, S 1800P-50 B |
| C410 | 87-010-181-080 | | C-CAP, S 1800P-50 B |
| C411 | 87-010-188-080 | | C-CAP, S 6800P-50 B |
| C412 | 87-010-188-080 | | C-CAP, S 6800P-50 B |
| C415 | 87-012-154-080 | | C-CAP, S 150P-50 CH |
| C416 | 87-012-154-080 | | C-CAP, S 150P-50 CH |
| C451 | 87-012-156-080 | | C-CAP, S 220P-50 CH |
| C452 | 87-012-156-080 | | C-CAP, S 220P-50 CH |
| C453 | 87-010-178-080 | | C-CAP, S 1000P-50 B |
| C456 | 87-010-260-080 | | CAP, E 47-25 SME |
| C457 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C458 | 87-010-183-080 | | C-CAP, S 2700P-50 B |
| C459 | 87-010-183-080 | | C-CAP, S 2700P-50 B |
| C460 | 87-010-183-080 | | C-CAP, S 2700P-50 B |
| C470 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C501 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C502 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C503 | 87-012-155-080 | | C-CAP, S 180P-50 CH |
| C504 | 87-012-155-080 | | C-CAP, S 180P-50 CH |
| C507 | 87-010-178-080 | | C-CAP, S 1000P-50 B |
| C508 | 87-010-178-080 | | C-CAP, S 1000P-50 B |
| C509 | 87-010-371-080 | | CAP, E 470-6.3 |
| C515 | 87-010-545-080 | | CAP, E 0.22-50 SME |
| C516 | 87-010-545-080 | | CAP, E 0.22-50 SME |
| C517 | 87-012-142-080 | | C-CAP, S 0.33-16 F |
| C518 | 87-012-142-080 | | C-CAP, S 0.33-16 F |
| C519 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C521 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C522 | 87-010-318-080 | | C-CAP, S 47P-50 CH |
| C523 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C524 | 87-010-402-080 | | CAP, E 2.2-50 SME |
| C530 | 87-010-194-080 | | C-CAP, S 0.047-25 F |
| C531 | 87-010-545-080 | | CAP, E 0.22-50 SME |
| C532 | 87-010-382-080 | | CAP, E 22-25 SME |
| C533 | 87-010-404-080 | | CAP, E 4.7-50 SME |
| C534 | 87-010-404-080 | | CAP, E 4.7-50 SME |
| C535 | 87-010-404-080 | | CAP, E 4.7-50 SME |
| C536 | 87-010-404-080 | | CAP, E 4.7-50 SME |
| C537 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C538 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C539 | 87-010-405-080 | | CAP, E 10-50 SME |
| C540 | 87-010-260-080 | | CAP, E 47-25 SME |
| C541 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C543 | 87-010-546-080 | | CAP, E 0.33-50 SME |
| C544 | 87-010-546-080 | | CAP, E 0.33-50 SME |
| C545 | 87-010-400-080 | | CAP, E 0.47-50 SME |
| C546 | 87-010-400-080 | | CAP, E 0.47-50 SME |
| C547 | 87-010-220-080 | | C-CAP, S 0.018-25 B〈HE, HM, HR〉 |
| C547 | 87-012-365-080 | | C-CAP, S 0.027-25 BK〈LH〉 |
| C548 | 87-010-220-080 | | C-CAP, S 0.018-25 B〈HE, HM, HR〉 |
| C548 | 87-012-365-080 | | C-CAP, S 0.027-25 BK〈LH〉 |
| C549 | 87-012-142-080 | | C-CAP, S 0.33-16 F |
| C550 | 87-016-081-080 | | C-CAP, S 0.1-16 RK |
| C551 | 87-016-081-080 | | C-CAP, S 0.1-16 RK |
| C601 | 87-010-401-080 | | CAP, E 1-50 SME |
| C602 | 87-010-405-080 | | CAP, E 10-50 SME |
| C603 | 87-010-101-080 | | CAP, E 220-16 SME |
| C605 | 87-010-178-080 | | C-CAP, S 1000P-50 B |
| C606 | 87-015-627-080 | | C-CAP, 1000P-50 B K |
| C607 | 87-010-404-080 | | CAP, E 4.7-50 SME |
| C608 | 87-010-404-080 | | CAP, E 4.7-50 SME |
| C609 | 87-010-404-080 | | CAP, E 4.7-50 SME |
| C610 | 87-010-404-080 | | CAP, E 4.7-50 SME |
| C611 | 87-010-177-080 | | C-CAP, S 820P-50 SL |
| C612 | 87-010-177-080 | | C-CAP, S 820P-50 SL |
| C613 | 87-010-404-080 | | CAP, E 4.7-50 SME |
| C614 | 87-010-404-080 | | CAP, E 4.7-50 SME |
| C615 | 87-010-400-080 | | CAP, E 0.47-50 SME |
| C616 | 87-010-400-080 | | CAP, E 0.47-50 SME |
| C617 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C618 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C619 | 87-010-184-080 | | C-CAP, S 3300P-50 B |
| C620 | 87-010-184-080 | | C-CAP, S 3300P-50 B |
| C621 | 87-012-155-080 | | C-CAP, S 180P-50 CH |
| C622 | 87-012-155-080 | | C-CAP, S 180P-50 CH |
| C623 | 87-010-405-080 | | CAP, E 10-50 SME |
| C624 | 87-010-405-080 | | CAP, E 10-50 SME |
| C630 | 87-010-405-080 | | CAP, E 10-50 SME |
| C631 | 87-010-401-080 | | CAP, E 1-50 SME |
| C640 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C641 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C645 | 87-012-142-080 | | C-CAP, S 0.33-16 F |
| C646 | 87-012-142-080 | | C-CAP, S 0.33-16 F |
| C647 | 87-012-142-080 | | C-CAP, S 0.33-16 F |
| C648 | 87-012-142-080 | | C-CAP, S 0.33-16 F |
| C701 | 87-010-381-080 | | CAP, E 330-16 SME |
| C702 | 87-010-404-080 | | CAP, E 4.7-50 SME |
| C703 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C704 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C711 | 87-010-263-080 | | CAP, E 100-10 |
| C712 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C722 | 87-010-312-080 | | C-CAP, S 15P-50 CH |
| C723 | 87-010-178-080 | | C-CAP, S 1000P-50 B |
| C724 | 87-010-178-080 | | C-CAP, S 1000P-50 B |
| C725 | 87-015-627-080 | | C-CAP, 1000P-50 B K |
| C726 | 87-018-131-080 | | CAP, TC-U 1000P-50 B |
| C727 | 87-010-194-080 | | C-CAP, S 0.047-25 F〈LH〉 |
| C727 | 87-010-196-080 | | C-CAP, S 0.1-25 F〈HE, HM, HR〉 |
| C728 | 87-010-248-080 | | CAP, E 220-10 SME |
| C732 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C771 | 87-010-405-080 | | CAP, E 10-50 SME |
| C772 | 87-010-194-080 | | C-CAP, S 0.047-25 F |
| C773 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C774 | 87-010-263-080 | | CAP, E 100-10 |
| C775 | 87-010-405-080 | | CAP, E 10-50 SME |
| C776 | 87-010-197-080 | | C-CAP, S 0.01-25 B〈LH〉 |
| C777 | 87-010-400-080 | | CAP, E 0.47-50 SME |
| C778 | 87-010-401-080 | | CAP, E 1-50 SME |
| C779 | 87-010-401-080 | | CAP, E 1-50 SME |
| C780 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C781 | 87-010-405-080 | | CAP, E 10-50 SME |
| C782 | 87-010-405-080 | | CAP, E 10-50 SME |
| C787 | 87-010-184-080 | | C-CAP, S 3300P-50 B |
| C788 | 87-010-184-080 | | C-CAP, S 3300P-50 B |
| C789 | 87-010-179-080 | | C-CAP, S 1200P-50 B |
| C790 | 87-010-179-080 | | C-CAP, S 1200P-50 B |
| C791 | 87-010-401-080 | | CAP, E 1-50 SME |

| REF. NO | PART NO. | カンリ NO. | DESCRIPTION |
|---|---|---|---|
| C792 | 87-010-180-080 | | C-CAP, S 1500P-50 B |
| C793 | 87-010-189-080 | | C-CAP, S 8200P-50 B |
| C794 | 87-010-408-080 | | CAP, E 47-50 SME |
| C795 | 87-010-194-080 | | C-CAP, S 0.047-25 F |
| C796 | 87-010-403-080 | | CAP, E 3.3-50 SME |
| C797 | 87-010-405-080 | | CAP, E 10-50 SME〈LH〉 |
| C798 | 87-010-196-080 | | C-CAP, S 0.1-25 F〈LH〉 |
| C802 | 87-010-154-080 | | C-CAP, S 10P-50 CH |
| C804 | 87-010-151-080 | | C-CAP, S 7P-50 CH |
| C805 | 87-010-150-080 | | C-CAP, S 6P-50 CH |
| C806 | 87-010-145-080 | | C-CAP, S 1P-50 CH |
| C807 | 87-010-154-080 | | C-CAP, S 10P-50 CH |
| C808 | 87-010-322-080 | | C-CAP, S 100P-50 CH |
| C809 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C810 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C811 | 87-010-149-080 | | C-CAP, S 5P-50 CH |
| C812 | 87-010-313-080 | | C-CAP, S 18P-50 CH |
| C813 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C814 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C816 | 87-010-197-080 | | C-CAP, S 0.01-25 B〈LH〉 |
| C817 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C818 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C819 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C820 | 87-010-260-080 | | CAP, E 47-25 SME |
| C821 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C822 | 87-015-819-080 | | C-CAP 0.01 |
| C823 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C830 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C831 | 87-010-154-080 | | C-CAP, S 10P-50 CH |
| C835 | 87-010-154-080 | | C-CAP, S 10P-50 CH |
| C836 | 87-010-312-080 | | C-CAP, S 15P-50 CH |
| C837 | 87-010-312-080 | | C-CAP, S 15P-50 CH |
| C840 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C843 | 87-010-146-080 | | C-CAP, S 2P-50 CH |
| C944 | 87-010-311-080 | | C-CAP, S 12P-50 CH〈LH〉 |
| C946 | 87-010-401-080 | | CAP, E 1-50 SME |
| C947 | 87-010-197-080 | | C-CAP, S 0.01-25 B〈LH〉 |
| C948 | 87-010-401-080 | | CAP, E 1-50 SME〈LH〉 |
| C950 | 87-010-322-080 | | C-CAP, S 100P-50 CH〈LH〉 |
| C951 | 87-010-197-080 | | C-CAP, S 0.01-25 B〈HE, HM, HR〉 |
| C952 | 87-010-197-080 | | C-CAP, S 0.01-25 B〈HE, HM, HR〉 |
| C953 | 87-010-197-080 | | C-CAP, S 0.01-25 B〈HE, HM, HR〉 |
| C954 | 87-010-263-080 | | CAP, E 100-10 SME 5X11〈HE, HM, HR〉 |
| C955 | 87-010-315-080 | | C-CAP, S 27P-50 CH〈HE, HM, HR〉 |
| C956 | 87-010-197-080 | | C-CAP, S 0.01-25 B〈HE, HM, HR〉 |
| C957 | 87-010-197-080 | | C-CAP, S 0.01-25 B〈HE, HM, HR〉 |
| C958 | 87-010-197-080 | | C-CAP, S 0.01-25 B〈HE, HM, HR〉 |
| C959 | 87-010-544-080 | | CAP, E 0.1-50〈HE, HM, HR〉 |
| C961 | 87-014-051-080 | | CAP, PP 560P-100 J〈HE, HM, HR〉 |
| C962 | 87-014-073-080 | | CAP, PP 4700P-100 J〈HE, HM, HR〉 |
| C963 | 87-010-312-080 | | C-CAP, S 15P-50 CH〈HE, HM, HR〉 |
| C964 | 87-012-150-080 | | C-CAP, S 20P-50 CH〈HE, HM, HR〉 |
| C965 | 87-010-186-080 | | C-CAP, S 4700P-50 B〈HE, HM, HR〉 |
| C966 | 87-010-263-080 | | CAP, E 100-10〈HE, HM, HR〉 |
| C970 | 87-010-197-080 | | C-CAP, S 0.01-25 B〈HE, HM, HR〉 |
| C971 | 87-010-197-080 | | C-CAP, S 0.01-25 B〈HE, HM, HR〉 |
| C972 | 87-010-197-080 | | C-CAP, S 0.01-25 B〈HE, HM, HR〉 |
| C973 | 87-010-150-080 | | C-CAP, S 6P-50 CH〈HE, HM, HR〉 |
| C976 | 87-010-400-080 | | CAP, E 0.47-50 SME〈HE, HM, HR〉 |
| C977 | 87-010-405-080 | | CAP, E 10-50 SME〈HE, HM, HR〉 |
| C980 | 87-010-197-080 | | C-CAP, S 0.01-25 B〈HE, HM, HR〉 |
| C981 | 87-018-134-080 | | CAP, TC-U 0.01-16 Y |
| C983 | 87-010-544-080 | | CAP, E 0.1-50〈LH〉 |
| C984 | 87-010-196-080 | | C-CAP, S 0.1-25 F〈LH〉 |
| C985 | 87-010-196-080 | | C-CAP, S 0.1-25 F〈LH〉 |
| C987 | 87-010-197-080 | | C-CAP, S 0.01-25 B〈LH〉 |
| C988 | 87-010-196-080 | | C-CAP, S 0.1-25 F〈LH〉 |
| C988 | 87-018-209-080 | | CAP, TC-U 0.1-50 F〈HE, HM, HR〉 |
| C989 | 87-018-134-080 | | CAP, TC-U 0.01-16 Y〈HE, HM, HR〉 |
| C990 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C991 | 87-010-196-080 | | C-CAP, S 0.1-25 F〈HE, HM, HR〉 |
| C992 | 87-010-196-080 | | C-CAP, S 0.1-25 F〈HE, HM, HR〉 |
| C993 | 87-018-209-080 | | CAP, TC-U 0.1-50 F〈HE, HM, HR〉 |
| C994 | 87-018-209-080 | | CAP, TC-U 0.1-50 F〈HE, HM, HR〉 |
| C995 | 87-018-134-080 | | CAP, TC-U 0.01-16 Y〈HE, HM, HR〉 |
| C996 | 87-018-209-080 | | CAP, TC-U 0.1-50 F〈HE, HM, HR〉 |
| C997 | 87-018-209-080 | | CAP, TC-U 0.1-50 F〈HE, HM, HR〉 |
| CF801 | 87-008-261-010 | | FLTR, SFE10.7MA5-A |
| CF802 | 87-008-261-010 | | FLTR, SFE10.7MA5-A |
| D801 | 87-002-730-080 | | VARI-CAP, SVC203SPA |
| D802 | 87-002-730-080 | | VARI-CAP, SVC203SPA |
| D803 | 87-002-730-080 | | VARI-CAP, SVC203SPA |
| D958 | 87-017-567-080 | | VARI-CAP, SVC342 M〈HE, HM, HR〉 |
| J250 | 87-049-855-010 | | JACK, 6.3 W/S |
| J253 | 87-099-475-010 | | JACK, PIN 3P BLK W/E |
| J254 | 87-033-226-010 | | TERMINAL, SP 4P (JT) |
| J652 | 80-MT3-616-010 | | JACK, PIN 2P |
| J801 | 82-NF5-621-010 | | ANT TERM JBT 0222 |
| L401 | 87-003-131-080 | | COIL, 10MH J |
| L402 | 87-003-131-080 | | COIL, 10MH J |
| L403 | 87-005-525-080 | | COIL, 22MH-J |
| L404 | 87-005-525-080 | | COIL, 22MH-J |
| L451 | 82-NV3-610-010 | | COIL, OSC BIAS 85K |
| L701 | 81-631-643-010 | | COIL, 1 POLE MPX |
| L702 | 81-631-643-010 | | COIL, 1 POLE MPX |
| L741 | 87-006-253-010 | | COIL, FM DET N |
| L742 | 81-631-612-010 | | CFMT 450A〈HE, HM, HR〉 |
| L742 | 81-NT1-659-010 | | FLTR, CFAZ-450 2NT〈LH〉 |
| L770 | 87-003-102-080 | | COIL, 10UH〈LH〉 |
| L771 | 87-003-098-080 | | COIL, 2.2UH |
| L801 | 87-006-249-010 | | COIL, ANT FM3/4TS, L4 |
| L802 | 87-006-254-010 | | COIL, ANT FM2-3/4TS, S |
| L803 | 87-006-244-010 | | COIL, RF FM 3-1/2T, L4 |
| L804 | 87-006-250-010 | | COIL, RF FM 3-1/2TS, L4 |
| L805 | 87-003-098-080 | | COIL, 2.2UH |
| L806 | 87-008-427-010 | | COIL, FMIFT (4T) |
| L807 | 87-006-205-010 | | COIL, OSC FM (7K) |
| L832 | 87-003-098-080 | | COIL, 2.2UH |
| L951 | 87-006-236-010 | | COIL, ANT MW(SG)〈HE, HM, HR〉 |
| L952 | 87-006-255-010 | | COIL, ANT SW1(SG7)〈HE, HM, HR〉 |
| L953 | 87-006-256-010 | | COIL, ANT SW2(SG7)〈HE, HM, HR〉 |
| L954 | 87-005-372-080 | | COIL, S 1 MH TAPG〈HE, HM, HR〉 |
| L955 | 87-005-372-080 | | COIL, S 1 MH TAPG〈HE, HM, HR〉 |
| L956 | 87-007-326-010 | | COIL, OSC MW(SG)〈HE, HM, HR〉 |
| L957 | 87-007-327-010 | | COIL, OSC SW1(SG)〈HE, HM, HR〉 |
| L958 | 87-007-332-010 | | COIL, OSC SW2(SG7)〈HE, HM, HR〉 |
| L981 | 81-MX4-620-010 | | AM PACK 3, S〈LH〉 |
| R105 | 87-022-050-080 | | RES, METAL 1W-0.22J |
| R106 | 87-022-050-080 | | RES, METAL 1W-0.22J |
| R203 | 87-022-391-080 | | RES, M/F 0.47-1W |
| R204 | 87-022-391-080 | | RES, M/F 0.47-1W |
| R243 | 87-022-391-080 | | RES, M/F 0.47-1W |
| R244 | 87-022-391-080 | | RES, M/F 0.47-1W |
| RY101 | 87-045-361-010 | | RELAY, DH12D2-OS(M)-2 |
| RY102 | 87-045-335-010 | | RELAY, G5Z-2A 12VDC |
| SFR301 | 87-024-349-080 | | SFR, 1K DIA6 H |
| SFR302 | 87-024-349-080 | | SFR, 1K DIA6 H |
| SFR351 | 87-024-349-080 | | SFR, 1K DIA6 H |
| SFR352 | 87-024-349-080 | | SFR, 1K DIA6 H |
| SFR401 | 87-024-349-080 | | SFR, 1K DIA6 H |
| SFR402 | 87-024-349-080 | | SFR, 1K DIA6 H |
| SFR451 | 87-024-356-080 | | SFR, 47K DIA6 H |
| SFR452 | 87-024-356-080 | | SFR, 47K DIA6 H |
| SFR722 | 87-024-171-080 | | SFR, 4.7K DIA6 V |
| SFR771 | 87-024-173-080 | | SFR, 22K DIA6 V |
| TC701 | 87-011-221-080 | | TRIMMER 30P VCT51 |
| TC801 | 87-011-219-080 | | CAP TRIMMER 10P VCT |
| TC802 | 87-011-219-080 | | CAP TRIMMER 10P VCT |
| TC951 | 87-011-220-080 | | CAP TRIMMER 20P VCT〈HE, HM, HR〉 |
| TC952 | 87-011-221-080 | | TRIMMER 30P VCT51〈HE, HM, HR〉 |

| REF. NO | PART NO. | カンリ NO. | DESCRIPTION |
|---|---|---|---|
| TC953 | 87-011-221-080 | | TRIMMER 30P VCT51〈HE, HM, HR〉 |
| VR651 | 83-NF5-639-010 | | VR, 50KBX2 RK14K12A0 |
| W101 | 81-MX4-647-010 | | F-CABEL, 7P-2.5 |
| X703 | 84-508-618-010 | | VIB, CER CSB 456 F/5 |
| X704 | 87-030-354-010 | | VIB, CF BFC450C〈HE, HM, HR〉 |
| X721 | 87-030-163-010 | | VIB, XTAL 7.2MHZ(NDK) |
| FRONT C.B | | | |
| C201 | 87-010-404-040 | | CAP, E 4.7-50 SME |
| C202 | 87-010-404-040 | | CAP, E 4.7-50 SME |
| C203 | 87-010-408-040 | | CAP, E 47-50 SME |
| C204 | 87-010-401-040 | | CAP, E 1-50 SME |
| C205 | 87-010-263-040 | | CAP, E 100-10 |
| C206 | 87-010-248-040 | | CAP, E 220-10〈LH〉 |
| C207 | 87-010-401-040 | | CAP, E 1-50 SME |
| C208 | 87-010-805-080 | | C-CAP, S 1-16 F |
| C210 | 87-010-146-080 | | C-CAP, S 2P-50 CH |
| C212 | 87-010-405-040 | | CAP, E 10-50 SME |
| C213 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C214 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C215 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C242 | 87-012-140-080 | | C-CAP, S 470P-50 CH |
| C352 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C381 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C382 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C383 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C389 | 87-010-150-080 | | C-CAP, S 6P-50 CH |
| C401 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C501 | 87-010-384-040 | | CAP, E 100-25 SME |
| C604 | 87-010-183-080 | | C-CAP, S 2700P-50 B |
| C606 | 87-010-401-040 | | CAP, E 1-50 SME |
| C607 | 87-012-140-080 | | C-CAP, S 470P-50 CH |
| C608 | 87-010-405-040 | | CAP, E 10-50 SME |
| C609 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C610 | 87-012-145-080 | | C-CAP, S 270P-50CH |
| C613 | 87-010-805-080 | | C-CAP, S 1-16 F |
| C624 | 87-010-183-080 | | C-CAP, S 2700P-50 B |
| C626 | 87-010-401-040 | | CAP, E 1-50 SME |
| C627 | 87-012-140-080 | | C-CAP, S 470P-50 CH |
| C630 | 87-010-405-040 | | CAP, E 10-50 SME |
| C640 | 87-010-405-040 | | CAP, E 10-50 SME |
| C645 | 87-010-263-040 | | CAP, E 100-10 |
| C646 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C650 | 87-010-260-040 | | CAP, E 47-25 SME |
| C701 | 87-010-175-080 | | C-CAP, S 560P-50 SL |
| C702 | 87-010-175-080 | | C-CAP, S 560P-50 SL |
| C703 | 87-010-154-080 | | C-CAP, S 10P-50 CH |
| C704 | 87-010-154-080 | | C-CAP, S 10P-50 CH |
| C705 | 87-012-154-080 | | C-CAP, S 150P-50 CH |
| C706 | 87-012-154-080 | | C-CAP, S 150P-50 CH |
| C707 | 87-010-220-080 | | C-CAP, S 0.018-25 B |
| C708 | 87-010-220-080 | | C-CAP, S 0.018-25 B |
| C709 | 87-010-186-080 | | C-CAP, S 4700P-50 B |
| C710 | 87-010-186-080 | | C-CAP, S 4700P-50 B |
| C711 | 87-012-140-080 | | C-CAP, S 470P-50 CH |
| C712 | 87-012-140-080 | | C-CAP, S 470P-50 CH |
| C713 | 87-010-213-080 | | C-CAP, S 0.015-25 B |
| C714 | 87-010-213-080 | | C-CAP, S 0.015-25 B |
| C715 | 87-010-318-080 | | C-CAP, S 47P-50 CH |
| C716 | 87-010-318-080 | | C-CAP, S 47P-50 CH |
| C717 | 87-010-178-080 | | C-CAP, S 1000P-50 B |
| C718 | 87-010-178-080 | | C-CAP, S 1000P-50 B |
| C719 | 87-010-176-080 | | C-CAP, S 680P-50 SL |
| C720 | 87-010-176-080 | | C-CAP, S 680P-50 SL |
| C721 | 87-010-402-040 | | CAP, E 2.2-50 SME |
| C722 | 87-010-402-040 | | CAP, E 2.2-50 SME |
| C729 | 87-010-263-040 | | CAP, E 100-10 |
| C730 | 87-010-384-040 | | CAP, E 100-25 SME |

| REF. NO | PART NO. | カンリ NO. | DESCRIPTION |
|---|---|---|---|
| FL101 | 83-NF5-630-010 | | FL, BJ238GK |
| FT101 | 83-NF5-632-010 | | CABLE FFC, 6P-1.25 |
| FT102 | 82-NF5-651-010 | | CABLE FFC, 14P-1.25 |
| J601 | 82-NF7-630-010 | | JACK, 3.5 MO |
| J621 | 82-NF7-630-010 | | JACK, 3.5 MO |
| L349 | 87-003-149-080 | | COIL, 47UH |
| LED401 | 87-017-784-080 | | LED, SEL1550CM TP8 |
| LED402 | 87-017-784-080 | | LED, SEL1550CM TP8 |
| LED403 | 87-017-784-080 | | LED, SEL1550CM TP8 |
| LED404 | 87-017-784-080 | | LED, SEL1550CM TP8 |
| LED405 | 87-017-784-080 | | LED, SEL1550CM TP8 |
| LED406 | 87-017-784-080 | | LED, SEL1550CM TP8 |
| LED407 | 87-017-731-080 | | LED, SEL1510CM2 |
| LED408 | 87-017-731-080 | | LED, SEL1510CM2 |
| LED409 | 87-017-785-080 | | LED, SEL4214S |
| LED410 | 87-017-731-080 | | LED, SEL1510CM2 |
| LED411 | 87-017-731-080 | | LED, SEL1510CM2 |
| LED412 | 87-017-731-080 | | LED, SEL1510CM2 |
| LED413 | 87-017-731-080 | | LED, SEL1510CM2 |
| LED414 | 87-017-731-080 | | LED, SEL1510CM2 |
| LED420 | 87-017-785-080 | | LED, SEL4214S |
| LED421 | 87-017-731-080 | | LED, SEL1510CM2 |
| LED422 | 87-017-785-080 | | LED, SEL4214S |
| LED423 | 87-017-785-080 | | LED, SEL4214S |
| S301 | 87-036-215-080 | | SW, TACT EVQ21404M |
| S302 | 87-036-215-080 | | SW, TACT EVQ21404M |
| S303 | 87-036-215-080 | | SW, TACT EVQ21404M |
| S304 | 87-036-215-080 | | SW, TACT EVQ21404M |
| S305 | 87-036-215-080 | | SW, TACT EVQ21404M |
| S306 | 87-036-215-080 | | SW, TACT EVQ21404M |
| S307 | 87-036-215-080 | | SW, TACT EVQ21404M |
| S308 | 87-036-215-080 | | SW, TACT EVQ21404M |
| S321 | 87-036-215-080 | | SW, TACT EVQ21404M |
| S322 | 87-036-215-080 | | SW, TACT EVQ21404M |
| S323 | 87-036-215-080 | | SW, TACT EVQ21404M |
| S324 | 87-036-215-080 | | SW, TACT EVQ21404M |
| S325 | 87-036-215-080 | | SW, TACT EVQ21404M |
| S326 | 87-036-215-080 | | SW, TACT EVQ21404M |
| S327 | 87-036-215-080 | | SW, TACT EVQ21404M |
| S328 | 87-036-215-080 | | SW, TACT EVQ21404M |
| S329 | 87-036-215-080 | | SW, TACT EVQ21404M |
| S330 | 87-036-215-080 | | SW, TACT EVQ21404M |
| S331 | 87-036-215-080 | | SW, TACT EVQ21404M |
| S332 | 87-036-215-080 | | SW, TACT EVQ21404M |
| S341 | 87-036-215-080 | | SW, TACT EVQ21404M |
| S342 | 87-036-215-080 | | SW, TACT EVQ21404M |
| S343 | 87-036-215-080 | | SW, TACT EVQ21404M |
| S344 | 87-036-215-080 | | SW, TACT EVQ21404M |
| S345 | 87-036-215-080 | | SW, TACT EVQ21404M |
| S346 | 87-036-215-080 | | SW, TACT EVQ21404M |
| S347 | 87-036-215-080 | | SW, TACT EVQ21404M |
| S348 | 87-036-215-080 | | SW, TACT EVQ21404M |
| VR601 | 82-NK7-616-010 | | VR, 10KB RK11K1130 |
| VR602 | 82-NK7-615-010 | | VR, 10KA RK11K1130 |
| X201 | 87-030-345-080 | | VIB, CER CST 5.76MGW |
| 3CD C.B | | | |
| C1 | 87-010-188-080 | | C-CAP, S 6800P-50 B |
| C2 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C3 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C4 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C5 | 87-010-404-080 | | CAP, E 4.7-50 SME |
| C6 | 87-010-213-080 | | C-CAP, S 0.015-25 B |
| C7 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C8 | 87-010-403-080 | | CAP, E 3.3-50 SME |
| C9 | 87-010-382-080 | | CAP, E 22-25 SME |
| C10 | 87-010-260-080 | | CAP, E 47-25 SME |
| C11 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C12 | 87-010-193-080 | | C-CAP, S 0.033-25 F |

| REF. NO | PART NO. | カンリ NO. | DESCRIPTION |
|---|---|---|---|
| C13 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C14 | 87-010-193-080 | | C-CAP, S 0.033-25 F |
| C15 | 87-010-182-080 | | C-CAP, S 2200P-50 B |
| C21 | 87-010-198-080 | | C-CAP, S 0.022-25 B |
| C22 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C23 | 87-010-263-080 | | CAP, E 100-10 |
| C24 | 87-010-178-080 | | C-CAP, S 1000P-50 B |
| C25 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C26 | 87-010-260-080 | | CAP, E 47-25 SME |
| C27 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C28 | 87-010-263-080 | | CAP, E 100-10 |
| C29 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C30 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C31 | 87-010-193-080 | | C-CAP, S 0.033-25 F |
| C33 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C34 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C35 | 87-010-381-080 | | CAP, E 330-16 SME |
| C36 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C37 | 87-010-260-080 | | CAP, E 47-25 SME |
| C38 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C39 | 87-010-260-080 | | CAP, E 47-25 SME |
| C40 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C41 | 87-010-146-080 | | C-CAP, S 2P-50 CH |
| C42 | 87-010-154-080 | | C-CAP, S 10P-50 CH |
| C45 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C101 | 87-010-194-080 | | C-CAP, S 0.047-25 F |
| C102 | 87-010-180-080 | | C-CAP, S 1500P-50 B |
| C103 | 87-010-263-080 | | CAP, E 100-10 |
| C104 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C105 | 87-010-186-080 | | C-CAP, S 4700P-50 B |
| C106 | 87-012-156-080 | | C-CAP, S 220P-50 CH |
| C107 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C108 | 87-010-400-080 | | CAP, E 0.47-50 SME |
| C112 | 87-010-154-080 | | C-CAP, S 10P-50 CH |
| C113 | 87-010-154-080 | | C-CAP, S 10P-50 CH |
| C114 | 87-010-314-080 | | C-CAP, S 22P-50 CH |
| C115 | 87-010-404-080 | | CAP, E 4.7-50 SME |
| C116 | 87-010-263-080 | | CAP, E 100-10 |
| C117 | 87-010-194-080 | | C-CAP, S 0.047-25 F |
| C118 | 87-010-154-080 | | C-CAP, S 10P-50 CH |
| C120 | 87-010-263-080 | | CAP, E 100-10 |
| C121 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C122 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C201 | 87-012-153-080 | | C-CAP, S 120P-50 CH |
| C202 | 87-012-153-080 | | C-CAP, S 120P-50 CH |
| C203 | 87-012-153-080 | | C-CAP, S 120P-50 CH |
| C204 | 87-012-153-080 | | C-CAP, S 120P-50 CH |
| C205 | 87-012-153-080 | | C-CAP, S 120P-50 CH |
| C206 | 87-012-153-080 | | C-CAP, S 120P-50 CH |
| C207 | 87-012-153-080 | | C-CAP, S 120P-50 CH |
| C208 | 87-012-153-080 | | C-CAP, S 120P-50 CH |
| C209 | 87-012-153-080 | | C-CAP, S 120P-50 CH |
| C210 | 87-012-153-080 | | C-CAP, S 120P-50 CH |
| C211 | 87-010-401-080 | | CAP, E 1-50 SME |
| C212 | 87-010-401-080 | | CAP, E 1-50 SME |
| C213 | 87-010-186-080 | | C-CAP, S 4700P-50 B |
| C214 | 87-010-186-080 | | C-CAP, S 4700P-50 B |
| C231 | 87-010-263-080 | | CAP, E 100-10 |
| C232 | 87-010-263-080 | | CAP, E 100-10 |
| C301 | 87-010-178-080 | | C-CAP, S 1000P-50 B |
| C304 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C305 | 87-010-260-080 | | CAP, E 47-25 SME |
| C306 | 87-010-198-080 | | C-CAP, S 0.022-25 B |
| C307 | 87-010-178-080 | | C-CAP, S 1000P-50 B |
| C308 | 87-010-178-080 | | C-CAP, S 1000P-50 B |
| C310 | 87-018-209-080 | | CAP, TC-U 0.1-50 F〈HE, HM, HR〉 |
| C311 | 87-018-209-080 | | CAP, TC-U 0.1-50 F〈HE, HM, HR〉 |
| C312 | 87-018-209-080 | | CAP, TC-U 0.1-50 F〈HE, HM, HR〉 |
| L1 | 87-003-295-080 | | COIL, 10UH |
| M301 | 87-045-305-010 | | MOTOR, RF-500TB |

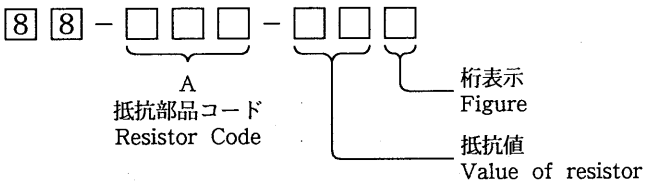
| REF. NO | PART NO. | カンリ NO. | DESCRIPTION |
|---|---|---|---|
| SFR1 | 87-024-176-080 | | SFR, 100K DIA6 V |
| SFR2 | 87-024-173-080 | | SFR 22K DIA6 V |
| SFR3 | 87-024-176-080 | | SFR, 100K DIA6 V |
| W301 | 83-NF5-631-010 | | F-CABLE, 6-2.0 300 |
| W501 | 83-NF5-644-010 | | F-CABLE, 2-2.0-230 |
| X101 | 87-030-227-080 | | VIB, XTAL 33.8688MHZ |
| ECHO/DSP C.B | | | |
| C901 | 87-010-248-040 | | CAP, E 220-10 SME |
| C902 | 87-010-384-040 | | CAP, E 100-25 SME |
| C903 | 87-010-186-080 | | C-CAP, S 4700P-50 B |
| C904 | 87-010-322-080 | | C-CAP, S 100P-50 CH |
| C905 | 87-010-401-040 | | CAP, E 1-50 SME |
| C906 | 87-010-187-080 | | C-CAP, S 5600P-50 B |
| C907 | 87-010-193-080 | | C-CAP, S 0.033-25 F |
| C908 | 87-010-544-040 | | CAP, E 0.1-50 SME |
| C909 | 87-010-188-080 | | C-CAP, S 6800P-50 B |
| C910 | 87-012-365-080 | | C-CAP, S 0.027-25V BK |
| C911 | 87-010-263-040 | | CAP, E 100-10 |
| C912 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C913 | 87-010-316-080 | | C-CAP, S 33P-50 CH |
| C914 | 87-010-177-080 | | C-CAP, S 820P-50 SL |
| C915 | 87-010-316-080 | | C-CAP, S 33P-50 CH |
| C916 | 87-010-177-080 | | C-CAP, S 820P-50 SL |
| C917 | 87-010-179-080 | | C-CAP, S 1200P-50 B |
| C918 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C919 | 87-010-260-040 | | CAP, E 47-25 SME |
| C920 | 87-010-400-040 | | CAP, E 0.47-50 |
| C921 | 87-010-400-040 | | CAP, E 0.47-50 |
| C922 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C923 | 87-010-187-080 | | C-CAP, S 5600P-50 B |
| C924 | 87-010-179-080 | | C-CAP, S 1200P-50 B |
| C925 | 87-010-198-080 | | C-CAP, S 0.022-25 B |
| C926 | 87-010-196-080 | | C-CAP, S 0.1-25 F |
| C927 | 87-010-181-080 | | C-CAP, S 1800P-50 B |
| C928 | 87-010-181-080 | | C-CAP, S 1800P-50 B |
| C929 | 87-010-382-040 | | CAP, E 22-25 SME |
| C941 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C942 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| C960 | 87-010-260-040 | | CAP, E 47-25 SME |
| L901 | 87-005-490-080 | | COIL, 270UH J FLR50 |
| MVR C.B | | | |
| C735 | 87-010-402-040 | | CAP, E 2.2-50 SME |
| C736 | 87-010-402-040 | | CAP, E 2.2-50 SME |
| C738 | 87-010-370-040 | | CAP, E 330-6.3 SME |
| C741 | 87-010-192-080 | | C-CAP, S 0.022-50 F |
| C745 | 87-016-073-080 | | CAP, E 1-50 FX |
| C746 | 87-016-073-080 | | CAP, E 1-50 FX |
| C747 | 87-010-401-040 | | CAP, E 1-50 SME |
| C748 | 87-010-401-040 | | CAP, E 1-50 SME |
| C750 | 87-010-384-040 | | CAP, E 100-25 SME |
| C751 | 87-010-401-040 | | CAP, E 1-50 SME |
| C752 | 87-010-401-040 | | CAP, E 1-50 SME |
| C757 | 87-010-401-040 | | CAP, E 1-50 SME |
| C773 | 87-010-400-040 | | CAP, E 0.47-50 SME |
| C777 | 87-010-403-040 | | CAP, E 3.3-50 SME |
| C778 | 87-010-403-040 | | CAP, E 3.3-50 SME |
| C797 | 87-010-401-040 | | CAP, E 1-50 SME |
| MVR741 | 81-MT3-630-010 | | VOL, 50KBX2 (M) |
| KEY C.B | | | |
| C351 | 87-010-197-080 | | C-CAP, S 0.01-25 B |
| LED415 | 87-002-787-080 | | LED, SEL 6215S RED |
| LED416 | 87-002-787-080 | | LED, SEL 6215S RED |
| LED417 | 87-002-787-080 | | LED, SEL 6215S RED |
| S349 | 87-036-215-080 | | SW, TACT EVQ21404M |

| REF. NO | PART NO. | ｶﾝﾘ NO. | DESCRIPTION |
|---|---|---|---|
| S350 | 87-036-215-080 | | SW, TACT EVQ21404M |
| S351 | 87-036-215-080 | | SW, TACT EVQ21404M |
| S352 | 87-036-215-080 | | SW, TACT EVQ21404M |
| S353 | 87-036-215-080 | | SW, TACT EVQ21404M |
| **SNSR C. B** | | | |
| PH401 | 87-026-573-010 | | P-SNSR, GP1S53V |
| **MOTOR-1 C. B** | | | |
| C301 | 87-018-209-080 | | CAP, TC-U 0. 1-50 F〈HE, HM, HR〉 |
| M302 | 87-045-305-010 | | MOTOR, RF-500TB |
| **U/D SW C. B** | | | |
| SW601 | 87-036-271-010 | | SW, LVR 1-2-2 (*) |
| **OPEN SW C. B** | | | |
| SW602 | 87-036-271-010 | | SW, LVR 1-2-2 (*) |
| **CLOSE SW C. B** | | | |
| SW701 | 87-036-109-010 | | SW, PUSH SPPB 61 |
| **LED C. B** | | | |
| LED902 | 87-017-806-010 | | LED, SEL1810DM |
| LED902 | 87-017-806-010 | | LED, SEL1810DM |
| LED903 | 87-017-350-080 | | LED, SEL1550CM |
| LED903 | 87-017-350-080 | | LED, SEL1550CM |
| LED904 | 87-017-350-080 | | LED, SEL1550CM |
| LED904 | 87-017-350-080 | | LED, SEL1550CM |
| LED905 | 87-017-806-010 | | LED, SEL1810DM |
| LED905 | 87-017-806-010 | | LED, SEL1810DM |
| **MOTOR-2 C. B** | | | |
| M2 | 9X-262-513-210 | | SLED MOTOR |
| S4 | 91-572-085-110 | | LEAF SW |

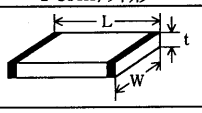
| REF. NO | PART NO. | ｶﾝﾘ NO. | DESCRIPTION |
|---|---|---|---|
| **AC2 C. B** | | | |
| ⚠ PT1 | 83-NF5-606-010 | | PT, 3NF-5 HE〈HE, HM, LH〉 |
| ⚠ PT1 | 83-NF5-604-010 | | PT, 3NF-5 HR〈HR〉 |
| R101 | 87-022-537-080 | | RES, NF 0. 68-1/2W J |
| R102 | 87-022-537-080 | | RES, NF 0. 68-1/2W J |
| **DECK-1 C. B** | | | |
| SOL1 | 82-ZM1-618-310 | | SOL ASSY, 27 |
| SW4 | 87-036-110-010 | | SW, PUSH SPPB 62 |
| SW5 | 87-036-110-010 | | SW, PUSH SPPB 62 |
| SW6 | 87-036-110-010 | | SW, PUSH SPPB 62 |
| **DECK-2 C. B** | | | |
| SFR1 | 87-024-170-080 | | SFR, 3. 3K DIA6 V |
| SOL2 | 82-ZM1-618-310 | | SOL ASSY, 27 |
| SW2 | 87-036-110-010 | | SW, PUSH SPPB 62 |
| SW3 | 87-036-110-010 | | SW, PUSH SPPB 62 |
| SW4 | 87-036-110-010 | | SW, PUSH SPPB 62 |
| SW5 | 87-036-110-010 | | SW, PUSH SPPB 62 |
| SW6 | 87-036-110-010 | | SW, PUSH SPPB 62 |
| **RELAY-1 C. B** | | | |
| **RELAY-2 C. B** | | | |
| **AC1 C. B** | | | |
| ⚠ | 87-033-147-010 | | CLAMP, FUSE |
| ⚠ | 82-304-743-010 | | TERMINAL, 1P |
| ⚠ F101 | 87-035-367-010 | | FUSE, 3. 15A 250V T〈HR〉 |
| ⚠ F101 | 87-035-415-010 | | FUSE, T2. 5A 250V UL〈HE, HM, LH〉 |
| ⚠ SW101 | 87-036-229-010 | | SW, SL DP3C RA |
| **TR C. B〈HR〉** | | | |

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

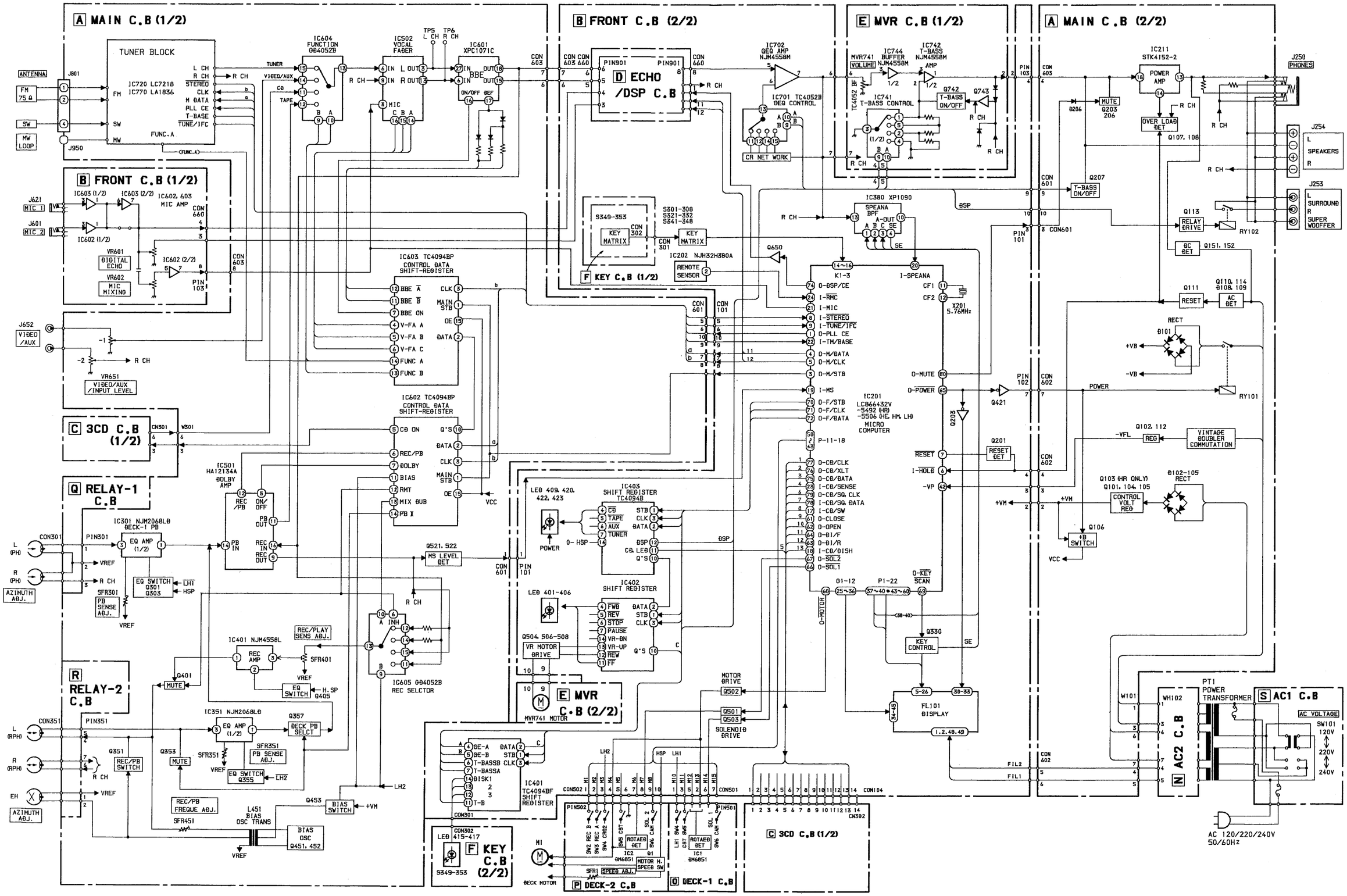
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



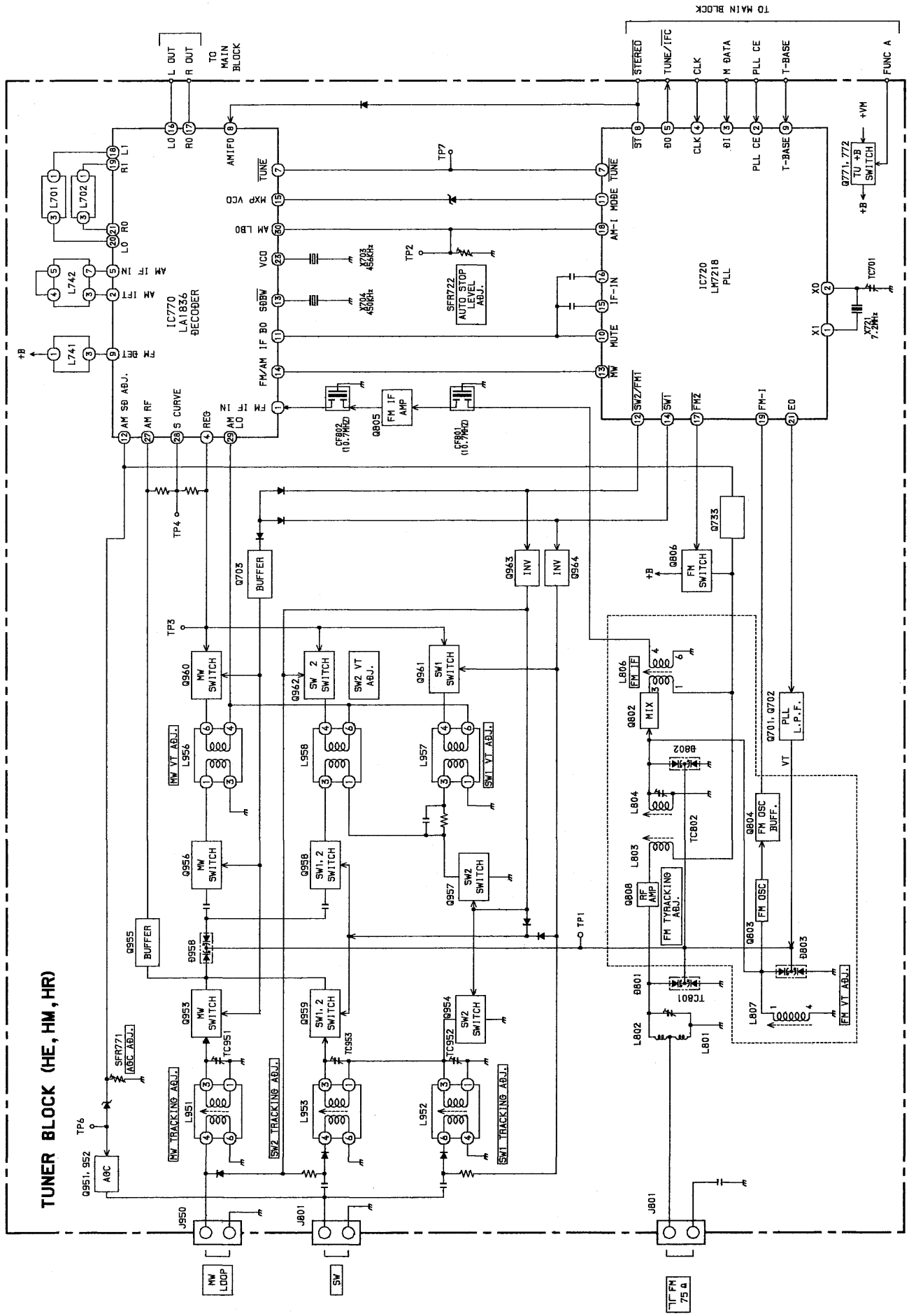

チップ抵抗
Chip resistor

| Wattage 容量 | Type 種類 | Tolerance 許容誤差 | Symbol 記号 | Dimensions／寸法 (mm) Form/外形 | L | W | t | Resistor Code : A 抵抗コード : A |
|---|---|---|---|---|---|---|---|---|
| 1/32W | 1608 | ±5% | CJ |  | 1.6 | 0.8 | 0.35 | 108 |
| 1/10W | 2125 | ±5% | CJ | | 2 | 1.25 | 1.45 | 118 |
| 1/8W | 3126 | ±5% | CJ | | 3.2 | 1.6 | 0.5 ~0.7 | 128 |

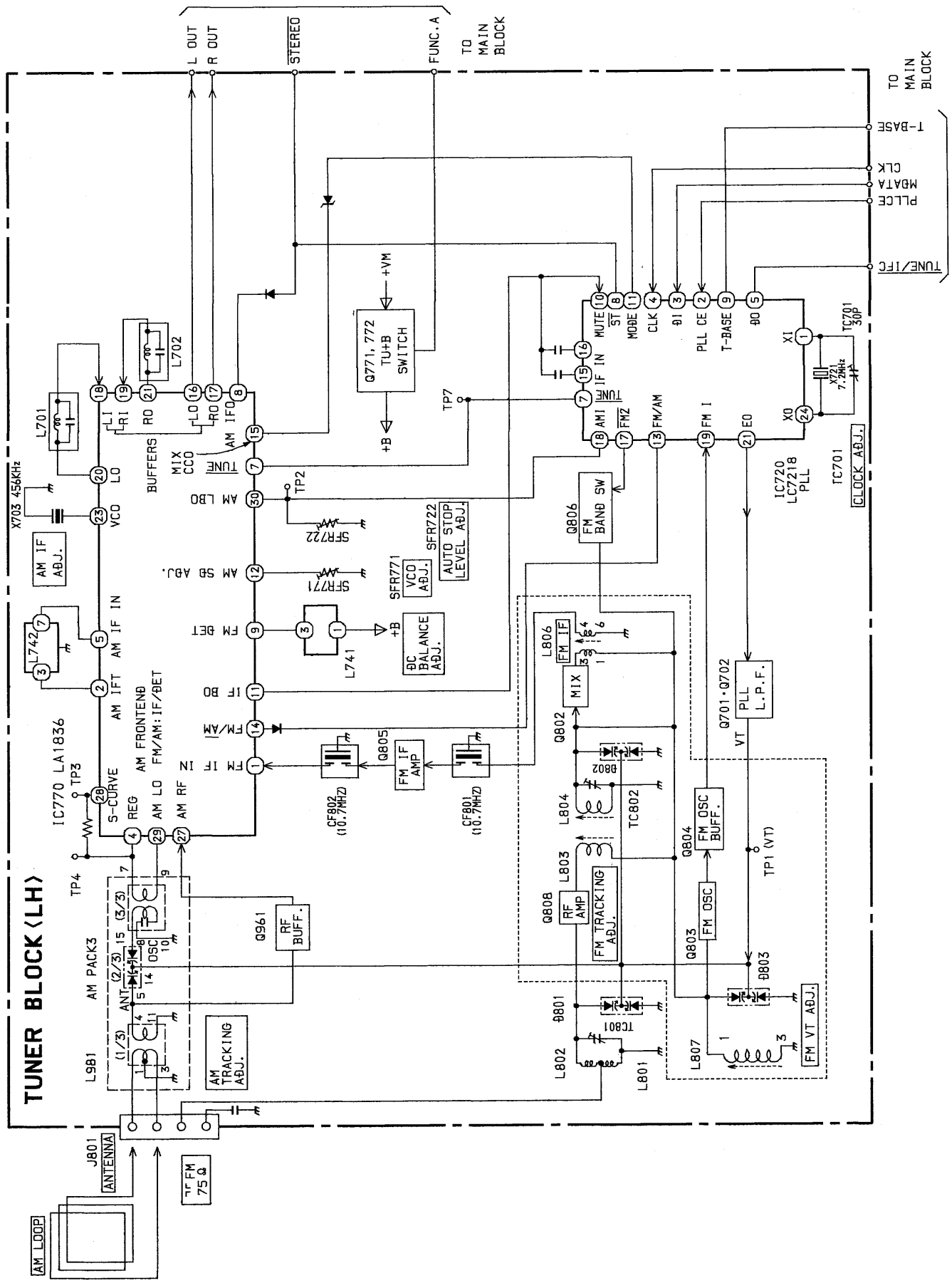
# BLOCK DIAGRAM – 1 (MAIN/FRONT)



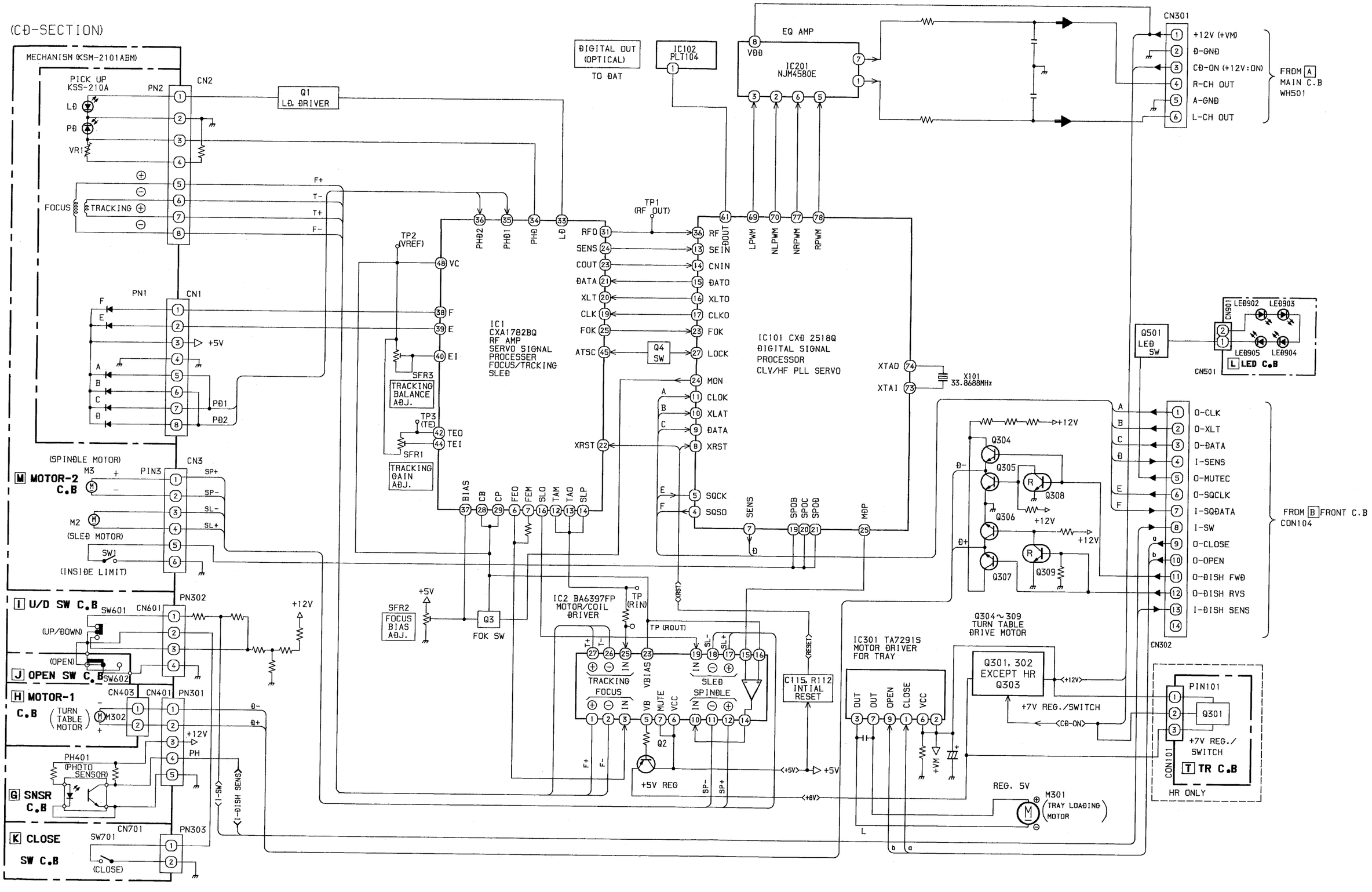
# BLOCK DIAGRAM – 2 (TUNER : HE, HM, HR)



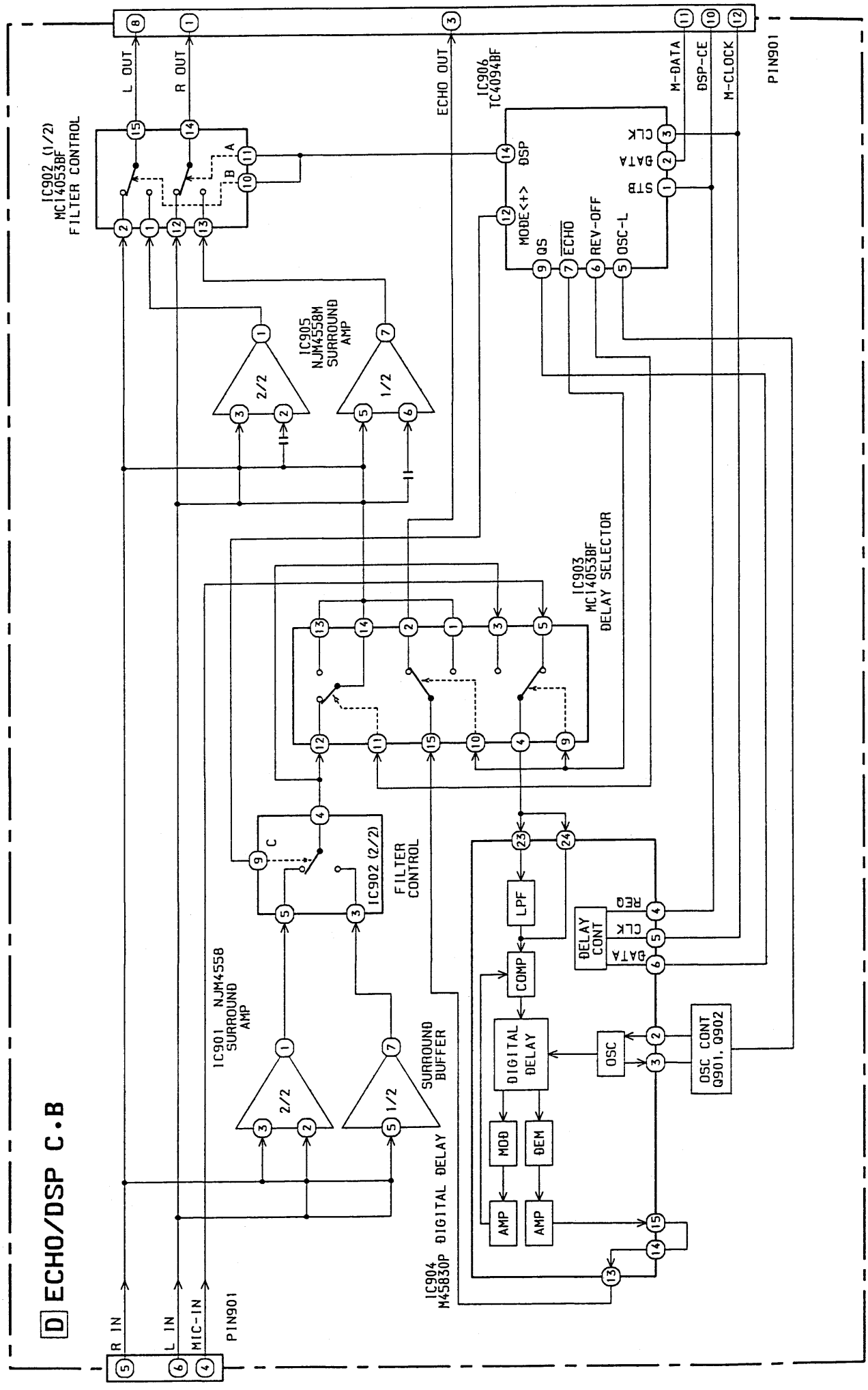
# BLOCK DIAGRAM – 3 (TUNER : LH)



# BLOCK DIAGRAM – 4 (CD)

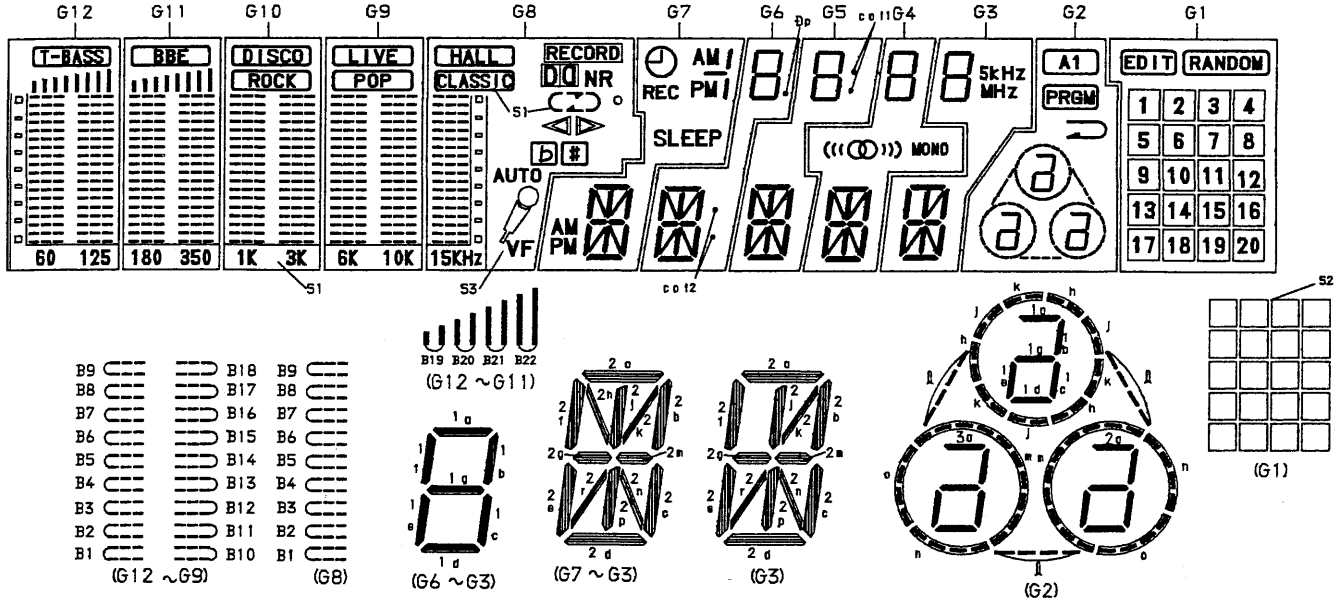


BLOCK DIAGRAM – 5 (DSP)



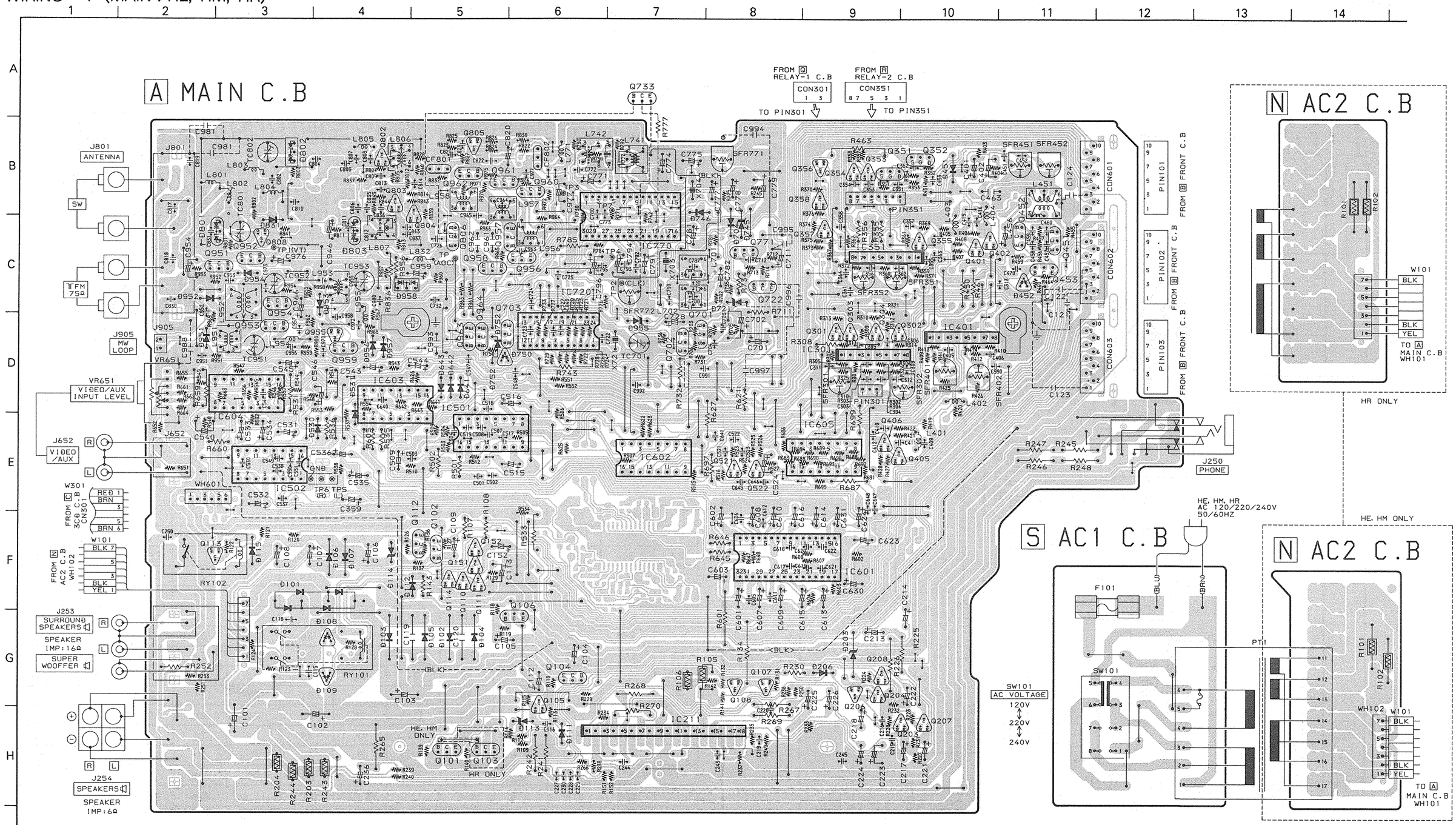
# FL (BJ238GK) GRID ASSIGNMENT／ANODE CONNECTION

## GRID ASSIGNMENT

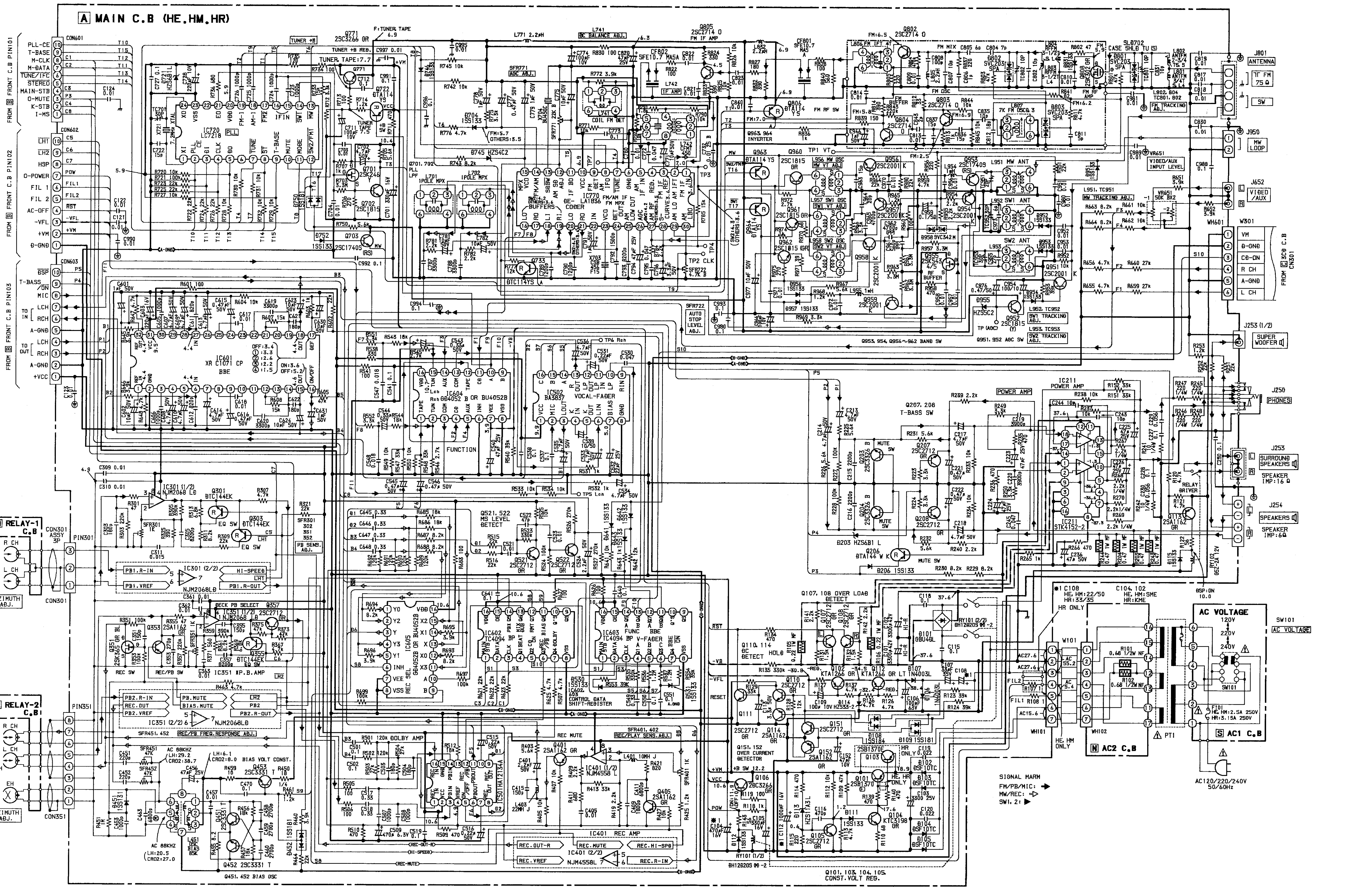



## ANODE CONNECTION

| | G12 | G11 | G10 | G9 | G8 | G7 | G6 | G5 | G4 | G3 | G2 | G1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P1 | B10 | B10 | B10 | B10 | S3 | 2d | 2d | 2d | 2d | 2d | n | **20** |
| P2 | B1 | B1 | B1 | B1 | B1 | 2j,2p | 2j,2p | 2j,2p | 2j,2p | 2j,2p | o | **19** |
| P3 | B11 | B11 | B11 | B11 | **AUTO** | 2n | 2n | 2n | 2n | 2n | 3e | **18** |
| P4 | B2 | B2 | B2 | B2 | B2 | 2r | 2r | 2r | 2r | 2r | 3c | **17** |
| P5 | B12 | B12 | B12 | B12 | (b) | 2c | 2c | 2c | 2c | 2c | 3a,3d,3g | **16** |
| P6 | B3 | B3 | B3 | B3 | B3 | 2e | 2e | 2e | 2e | 2e | 3b | **15** |
| P7 | B13 | B13 | B13 | B13 | (#) | 2m | 2m | 2m | 2m | 2m | 2e | **14** |
| P8 | B4 | B4 | B4 | B4 | B4 | 2g | 2g | 2g | 2g | 2g | 2c | **13** |
| P9 | B5 | B5 | B5 | B5 | B5 | 2f | 2f | 2f | 2f | 2f | 2a,2d,2g | **12** |
| P10 | B15 | B15 | B15 | B15 | ▷ | 2b | 2b | 2b | 2b | 2b | l | **11** |
| P11 | B6 | B6 | B6 | B6 | B6 | 2K | 2K | 2K | 2K | 2K | j | **10** |
| P12 | B16 | B16 | B16 | B16 | ◁ | 2h | 2h | 2h | 2h | **MHz** | h | **9** |
| P13 | B7 | B7 | B7 | B7 | B7 | 2a | 2a | 2a | 2a | 2a | k | **8** |
| P14 | B14 | B14 | B14 | B14 | ) | **PM** [DOWN] | col 2 | col 1 [UP] | **MONO** | **KHz** | 2b | **7** |
| P15 | B17 | B17 | B17 | B17 | ( | **AM** [DOWN] | Dp | col 1 [DOWN] | ((( ))) | **5** | 1e | **6** |
| P16 | B8 | B8 | B8 | B8 | B8 | **SLEEP** | 1d | 1d | 1d | 1d | 1a,1d,1g | **5** |
| P17 | B18 | B18 | B18 | B18 | o | **REC** | 1e | 1e | 1e | 1e | 1c | **4** |
| P18 | B9 | B9 | B9 | B9 | B9 | **PM** [UP] | 1c | 1c | 1c | 1c | 1b | **3** |
| P19 | B19 (T-BASS) | B19 (BBE) | (ROCK) | (POP) | DD NR | **AM** [UP] | 1g | 1g | 1g | 1g | m | **2** |
| P20 | B20 | B20 | (DISCO) | (LIVE) | RECORD | — | 1f | 1f | 1f | 1f | A1 | **1** |
| P21 | B21 | B21 | — | — | (CLASSIC) | / | 1b | 1b | 1b | 1b | ↩ | EDIT |
| P22 | B22 | B22 | — | — | (HALL) | 🕘 | 1a | 1a | 1a | 1a | PRGM | RANDOM |
| ST1 | S1 **T-BASS** | S1 | S1 **ROCK** | S1 **POP** | S1 | — | — | — | — | — | — | S2 |
| ST2 | — | **BBE** | — | — | — | — | — | — | — | — | — | — |
| ST3 | — | — | **DISCO** | **LIVE** | **HALL** | — | — | — | — | — | — | — |
| ST4 | — | — | — | — | b # | — | — | — | — | — | — | — |


A MAIN C.B
FROM Q RELAY-1 C.B
CON301
TO PIN301
FROM R RELAY-2 C.B
CON351
TO PIN351
J801 ANTENNA
SW
FM 75Ω
J905 MW LOOP
VR651 VIDEO/AUX INPUT LEVEL
J652 VIDEO /AUX
W301
FROM C MAIN C.B CN301
RED 1
BRN
BRN 6
W101
BLK 7
FROM N AC2 C.B WH102
BLK
YEL
J253 SURROUND SPEAKERS
SPEAKER IMP:16Ω
SUPER WOOFFER
J254 SPEAKERS
SPEAKER IMP:6Ω
J250 PHONE
HE, HM ONLY
HR ONLY
N AC2 C.B
FROM B FRONT C.B
PIN101
PIN102
PIN103
W101
BLK
YEL
TO A MAIN C.B WH101
HR ONLY
HE, HM, HR
AC 120/220/240V
50/60HZ
HE, HM ONLY
S AC1 C.B
F101
BLU
BRN
PT1
SW101
SW101
AC VOLTAGE
120V
220V
240V
WH102
W101
BLK
BLK
YEL
TO A MAIN C.B WH101

SCHEMATIC DIAGRAM – 1 (MAIN : HE, HM, HR)



A MAIN C.B (HE.HM.HR)
FROM B FRONT C.B PIN101
CON601
PLL-CE
T-BASE
M-CLK
M-DATA
TUNE/IFC
STEREO
MAIN-STB
O-MUTE
K-STB
I-MS
FROM B FRONT C.B PIN102
CON602
LH1
LH2
HSP
O-POWER
FIL 1
FIL 2
AC-OFF
-VFL
+VM
D-GND
FROM B FRONT C.B PIN103
CON603
DSP
T-BASS /ON
MIC
TO IN LCH RCH
A-GND
TO OUT LCH RCH
A-GND
+VCC
IC720 LC7218 PLL
IC770 LA1836 FM/AM IF FM MPX
IC601 XR C1071 CP BBE
IC604 GD4052 B OR BU4052B
FUNCTION
IC502 BA3837 VOCAL-FADER
Q805 2SC2714 O FM IF AMP
Q802 2SC2714 O
FM MIX
FM OSC
FM RF AMP
FM BUFFER
FM RF SW
Q963, 964 INVERTER
L951 MW ANT
L952 SW1 ANT
SW2 ANT
L956 MW OSC
L957 SW1 OSC
L958 SW2 OSC
RF BUFFER
Q953, 954, Q956~962 BAND SW
Q951, 952 AGC SW
SFR771 AGC ABJ.
L741 DC BALANCE ABJ.
COIL FM DET
IF AMP
SFR722 AUTO STOP LEVEL ADJ.
FM TRACKING ADJ.
MW TRACKING ADJ.
L952, TC952 SW1 TRACKING ADJ.
L953, TC953 SW2 TRACKING ADJ.
VIDEO/AUX INPUT LEVEL
J801 ANTENNA
FM 75 Ω
SW
J950 MW LOOP
J652 VIDEO /AUX
W301
VM
D-GND
CD-ON
R CH
A-GND
L CH
FROM C CD C.B CN301
J253 (1/2) SUPER WOOFER
J250 PHONES
J253 SURROUND SPEAKERS SPEAKER IMP:16 Ω
J254 SPEAKERS SPEAKER IMP:6Ω
IC211 POWER AMP STK4152-2
POWER AMP
Q207, 208 T-BASS SW
MUTE SW
RELAY DRIVER
Q RELAY-1 C.B
CON301 ASSY 3P
PIN301
AZIMUTH ADJ.
IC301 (1/2) NJM2068 LD
IC301 (2/2)
EQ SW
PB SENS. ADJ.
R RELAY-2 C.B
PIN351
CON351
DECK PB SELECT
IC351 (1/2) NJM2068 LD
IC351 P.B.AMP
IC351 (2/2) NJM2068LD
REC SW
REC/PB SW
SFR451, 452 REC/PB FREQ.RESPONSE ADJ.
BIAS VOLT CONST.
Q451, 452 BIAS OSC
IC605 REC SEL GD4052B OR BU4052B
IC602 TC4094 BP
IC603 TC4094 BP V-FADER
IC602, 603 CONTROL DATA SHIFT-REGISTER
Q521, 522 MS LEVEL DETECT
DOLBY AMP
IC501 HA12134A
REC MUTE
SFR401, 402 REC/PLAY SENS. ADJ.
IC401 (1/2) NJM4558 L
IC401 REC AMP
IC401 (2/2) NJM4558L
Q107, 108 OVER LOAD DETECT
Q110, 114 DC DETECT HOLD
Q151, 152 OVER CURRENT DETECTOR
Q101, 103, 104, 105, CONST. VOLT REG.
RY101 (1/2) DH12D205 M-2
RY101 (2/2)
*1 C108 HE, HM:22/50 HR:33/35
C104, 102 HE, HM:SME HR:KME
HR ONLY
HE, HM ONLY
W101
WH101
WH102
N AC2 C.B
PT1
AC VOLTAGE
120V
220V
240V
SW101 AC VOLTAGE
F101 HE, HM:2.5A 250V HR:3.15A 250V
S AC1 C.B
AC120/220/240V 50/60Hz
SIGNAL MARM
FM/PB/MIC:
MW/REC:
SW1, 2:

# A MAIN C.B

FROM Q RELAY-1 C.B CON301 (3 1) ⇩ TO PIN301
FROM R RELAY-2 C.B CON351 (8 7 5 3 1) ⇩ TO PIN351

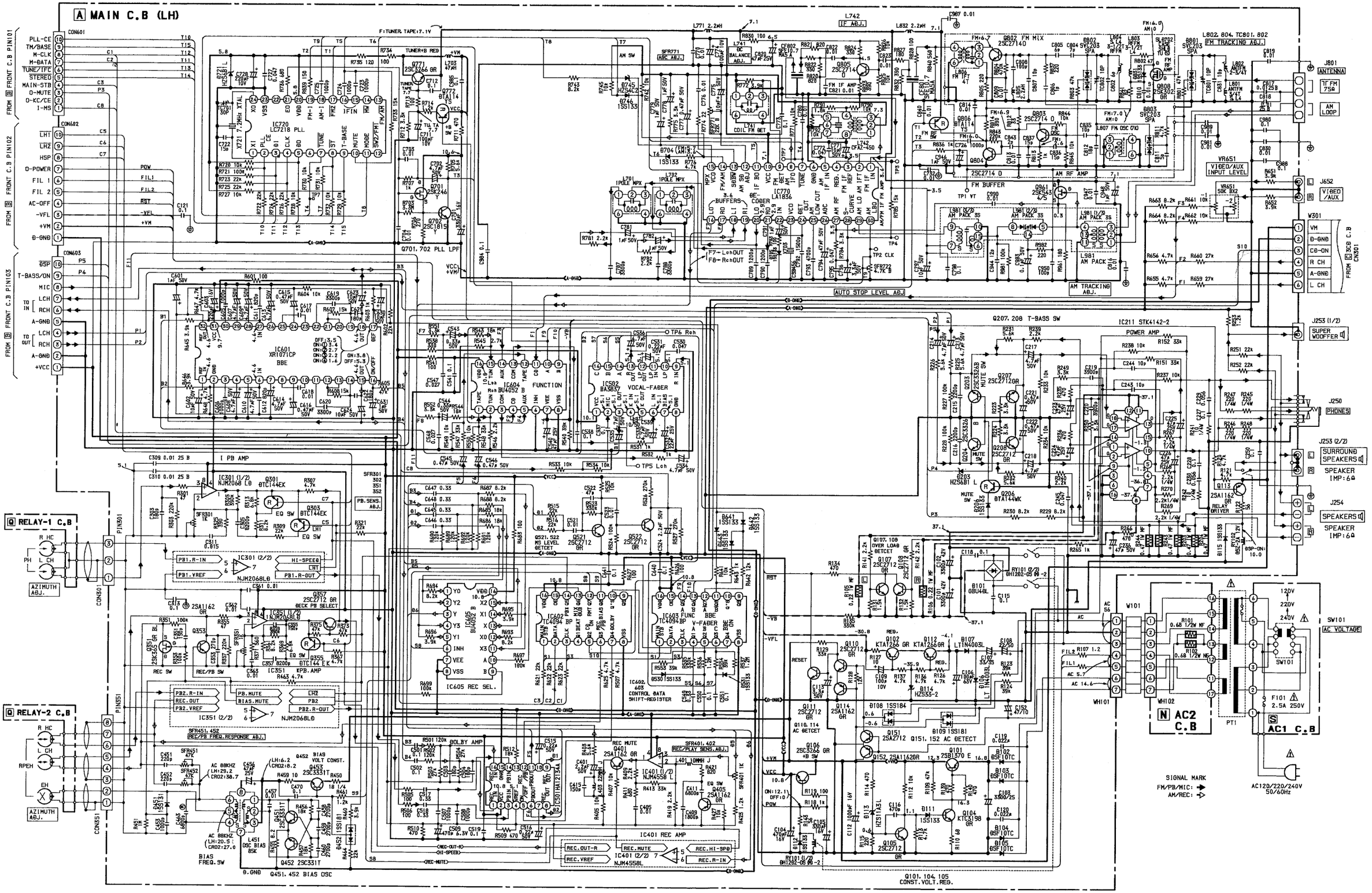
J801 ANTENNA
AM LOOP
FFM 75Ω
VR651 VIDEO/AUX INPUT LEVEL
J652 VIDEO /AUX (R) (L)
FROM C 3C0 C.B CN301
W301 RED BRN BRN
TO N AC2 C.B WH102
W101 7 BLK 5 3 BLK 1 YEL
J253 SURROUND SPEAKERS SPEAKER IMP:16Ω (R) (L)
SUPER WOOFFER (R) (L)
J254 SPEAKERS SPEAKER IMP:6Ω
(BLK)
(530G ONLY)
CON601 CON602 CON603
PIN101 PIN102 PIN103 FROM B FRONT C.B
J250 PHONES

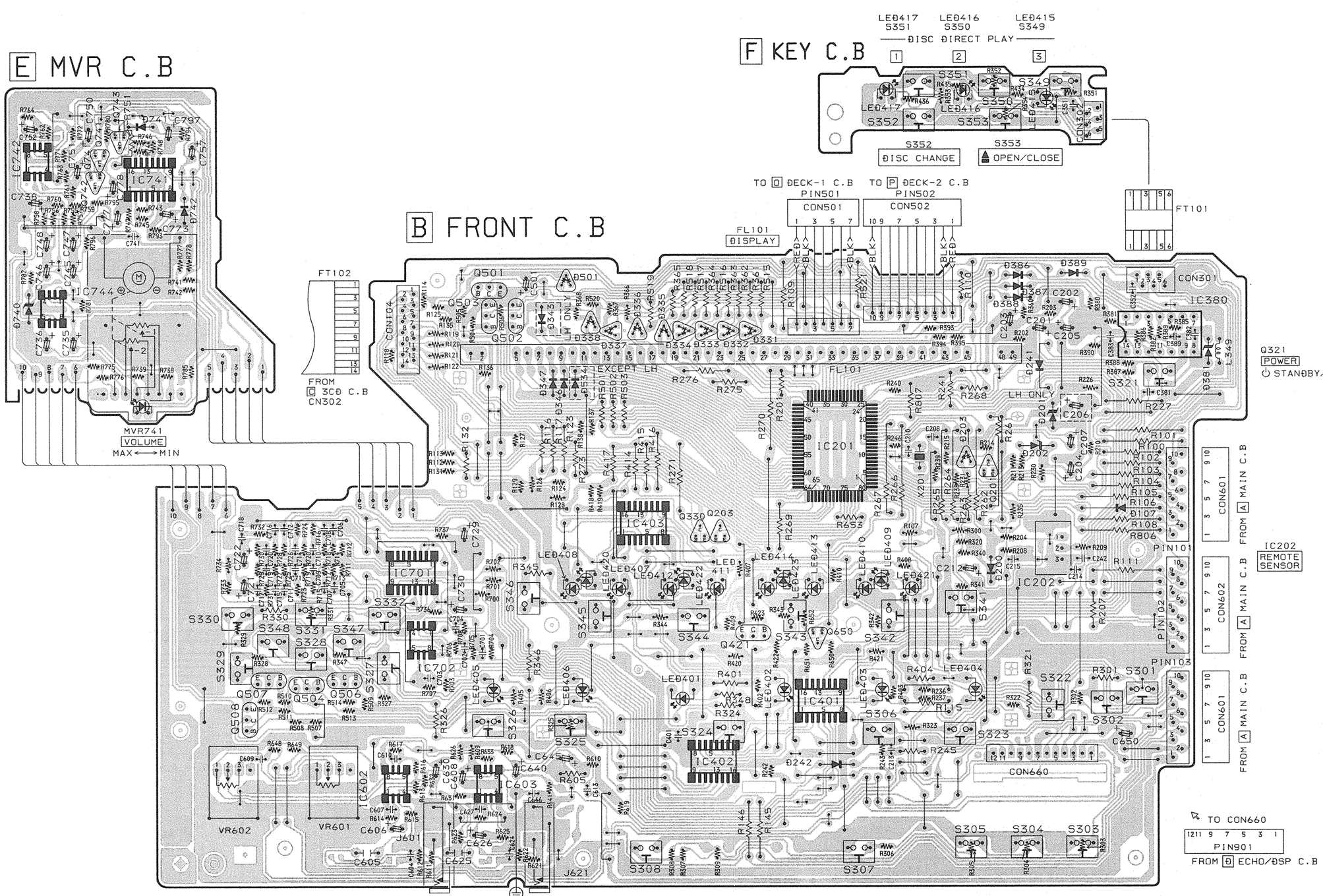


S AC1 C.B
AC 120/220/240V 50/60HZ
F101
PT1
SW101
SW101 AC VOLTAGE 120V ⇕ 220V ⇕ 240V
WH102 W101 BLK BLK YEL TO A MAIN C.B WH101

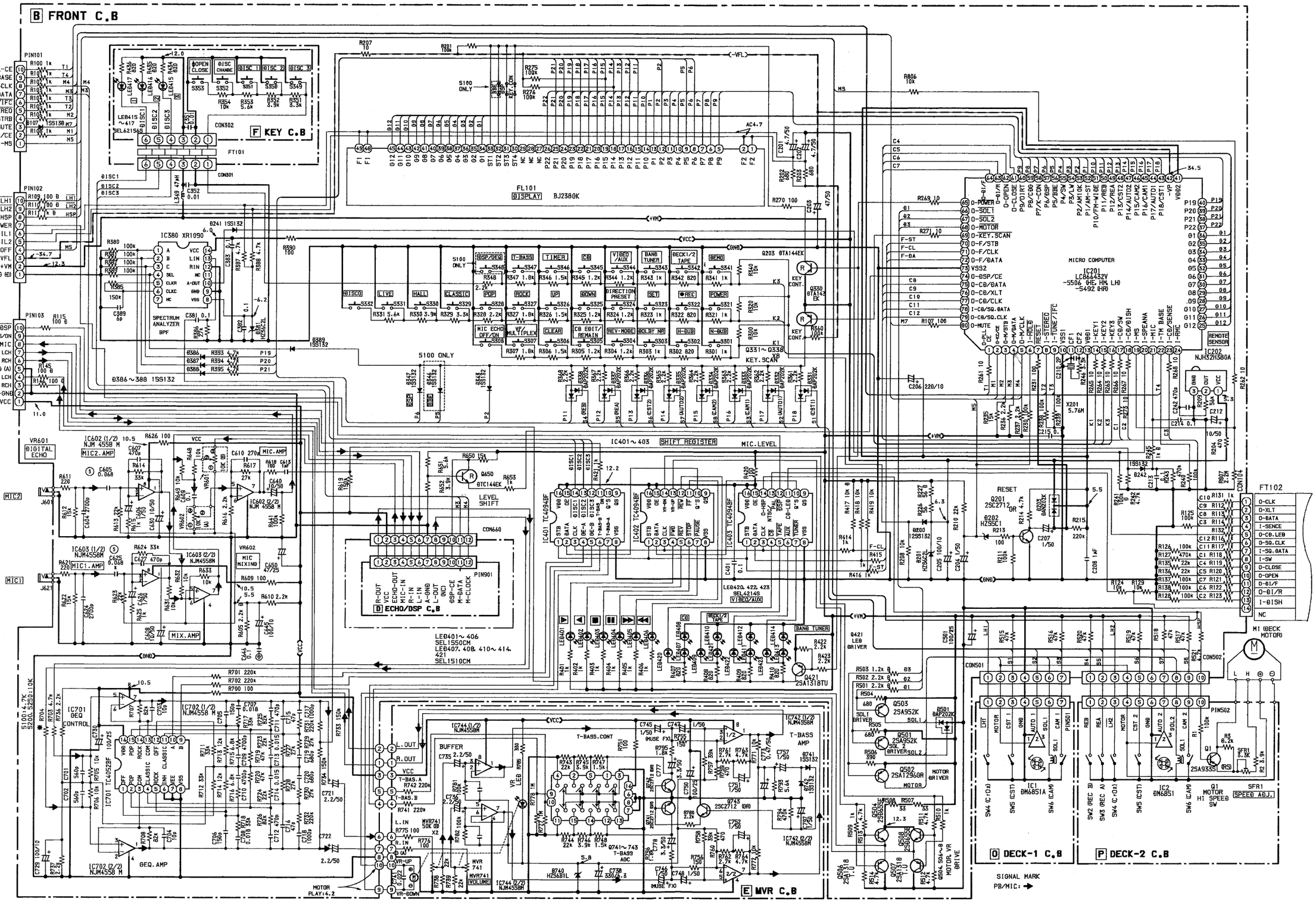
N AC2 C.B

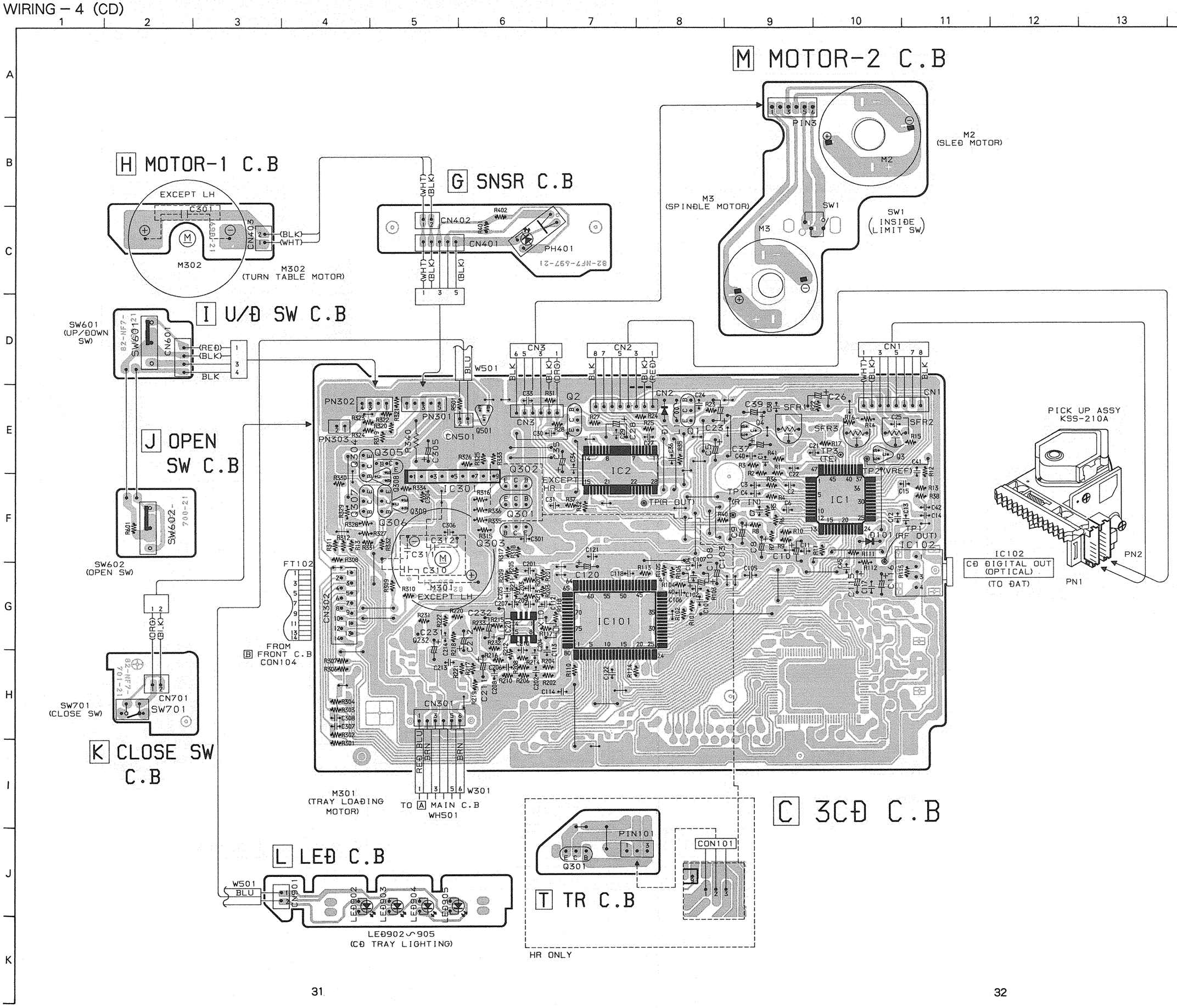
# SCHEMATIC DIAGRAM – 2 (MAIN : LH)

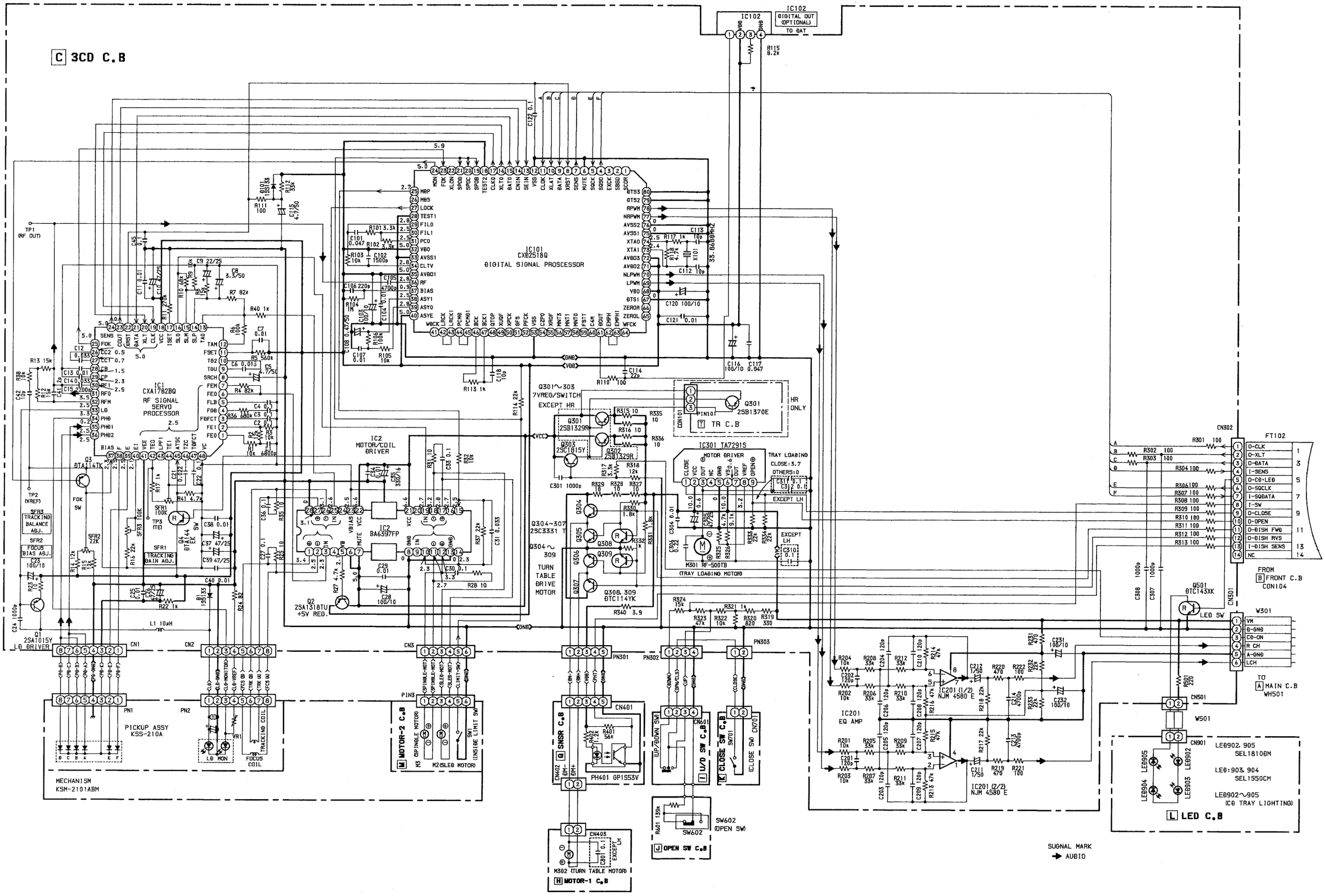



E MVR C.B
MVR741
VOLUME
MAX ⟷ MIN
F KEY C.B
LED417 S351
LED416 S350
LED415 S349
DISC DIRECT PLAY
S352
DISC CHANGE
S353
OPEN/CLOSE
TO O DECK-1 C.B
TO P DECK-2 C.B
PIN501
PIN502
CON501
CON502
FT101
FL101
DISPLAY
B FRONT C.B
FT102
FROM C 3CD C.B CN302
CON104
EXCEPT LH
LH ONLY
IC201
IC202
REMOTE SENSOR
IC380
IC401
IC402
IC403
IC602
IC603
IC701
IC702
CON301
CON660
Q321
POWER
STANDBY/ON
FROM A MAIN C.B CON601
PIN101
PIN102
PIN103
TO CON660
PIN901
FROM D ECHO/DSP C.B
VR602
MIC MIXING
MAX ⟷ MIN
VR601
DIGITAL ECHO
MAX ⟷ MIN
J601
MIC2
J621
MIC1
LED408, 420, 407
S345
CD
LED412, 422, 411
S344
VIDEO/AUX
LED414, 423, 413
S343
BAND TUNER
LED410, 409, 421
S342
DECK1/2 TAPE
S341
DEMO
S322
REC
REC MUTE
S302
HIGH
S301
NORMAL
SYNCHRO DUBBING
S330
HALL
S331
LIVE
S332
DISCO
S348
DSP/GEQ
S347
T-BASS
S329
CLASSIC
S328
POP
S327
ROCK
LED405
S326
UP
S346
TIMER
LED406
S325
DOWN
S308
MIC ECHO OFF/ON
LED401
S324
LED402
DIRECTION/PRESET
LED403
S306
CLEAR
LED404
S323
SET
S307
VOCAL FADER MULTIPLEX
S305
CD EDIT/ REMAIN
S304
REV MODE
S303
DOLBY NR

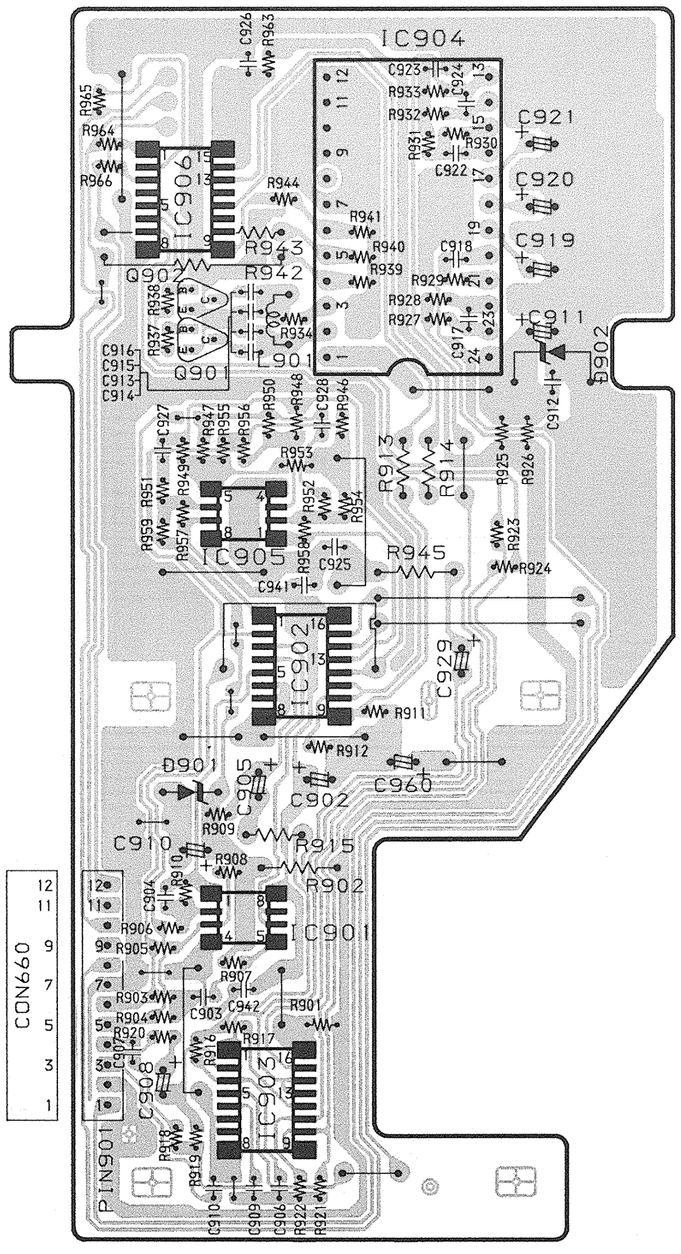
# SCHEMATIC DIAGRAM – 3 (FRONT)



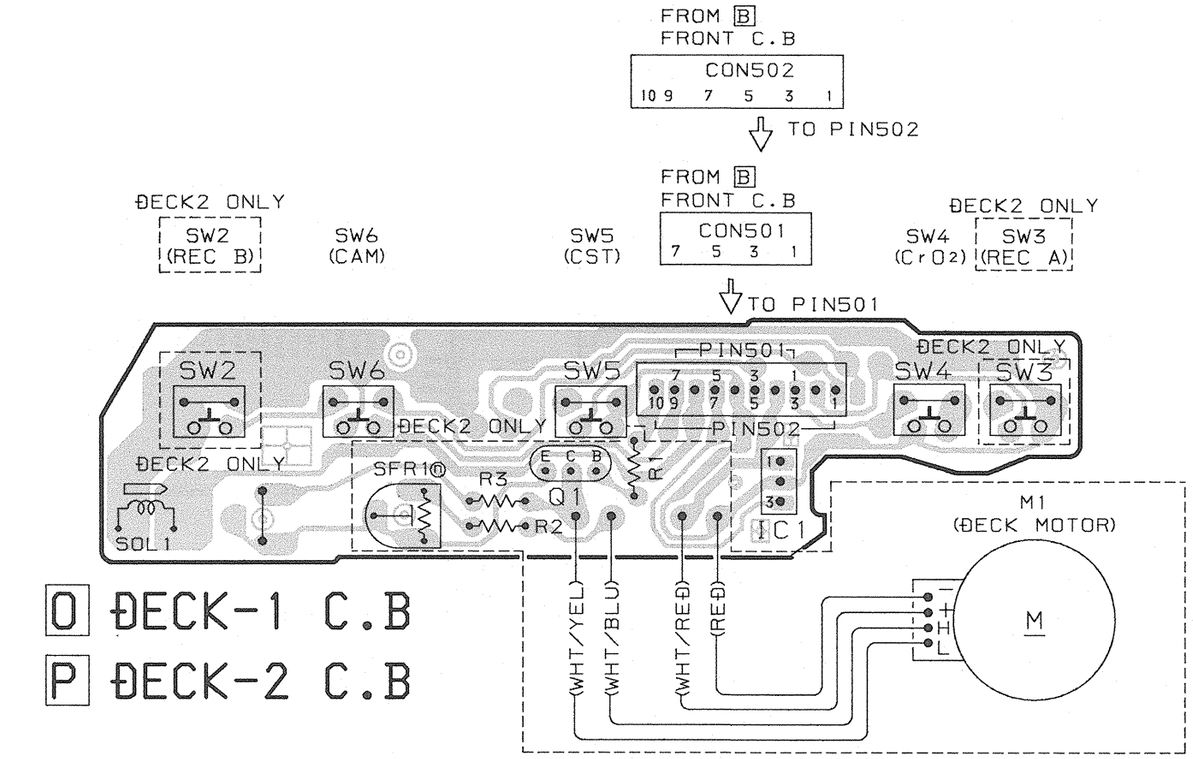

M MOTOR-2 C.B
M2
(SLED MOTOR)
PIN3
M2
M3
(SPINDLE MOTOR)
SW1
M3
SW1
(INSIDE
LIMIT SW)
H MOTOR-1 C.B
EXCEPT LH
C301
M302
M302
(TURN TABLE MOTOR)
(BLK)
(WHT)
CN403
G SNSR C.B
CN402
CN401
R402
R401
PH401
(WHT)
(BLK)
(BLK)
1 3 5
I U/D SW C.B
SW601
(UP/DOWN
SW)
CN601
(RED)
(BLK)
BLK
1
3
4
J OPEN
SW C.B
SW602
(OPEN SW)
R601
SW602-
700-21
K CLOSE SW
C.B
SW701
(CLOSE SW)
CN701
SW701
(ORG)
(BLK)
1 2
FT102
FROM
B FRONT C.B
CON104
W501
BLU
CN3
CN2
CN1
BLK
(ORG)
(RED)
(WHT)
PN302
PN301
PN303
CN501
Q501
Q305
Q304
Q307
Q309
Q306
Q302
Q301
Q303
EXCEPT
HR
IC301
IC312
IC311
IC310
M301
EXCEPT LH
IC2
IC1
IC101
IC102
TP(R OUT)
TP(R IN)
TP2(VREF)
TP1
TP3
(TE)
Q101(RF OUT)
SFR1
SFR2
SFR3
CN302
CN301
RED
BLU
BRN
BRN
M301
(TRAY LOADING
MOTOR)
TO A MAIN C.B
WH501
W301
C 3CD C.B
PICK UP ASSY
KSS-210A
IC102
CD DIGITAL OUT
(OPTICAL)
(TO DAT)
PN2
PN1
L LED C.B
W501
BLU
CN901
LED902
LED903
LED904
LED905
LED902~905
(CD TRAY LIGHTING)
PIN101
Q301
CON101
T TR C.B
HR ONLY


C 3CD C.B
IC102
DIGITAL OUT (OPTIONAL) TO DAT
IC101
CXD2518Q
DIGITAL SIGNAL PROSCESSOR
IC1
CXA1782BQ
RF SIGNAL SERVO PROCESSOR
IC2
MOTOR/COIL DRIVER
IC2
BA6397FP
IC301 TA7291S
MOTOR DRIVER
Q301~303
7VREG/SWITCH
EXCEPT HR
HR ONLY
Q301 2SB1329R
Q303 2SC1815Y
Q302 2SB1329R
Q301 2SB1370E
TR C.B
Q304~307 2SC3331 T
Q304~309
TURN TABLE DRIVE MOTOR
Q308, 309 DTC114YK
Q1 2SA1015Y
LD DRIVER
Q2 2SA1318TU +5V REG.
Q3 DTA114TK
Q4 DTA144EK
Q501 DTC143XK
LED SW
PICKUP ASSY KSS-210A
MECHANISM KSM-2101ABM
LD MON
FOCUS COIL
TRACKING COIL
PH401 GP1S53V
SNSR C.B
U/D SW C.B
CLOSE SW C.B
SW602 (OPEN SW)
OPEN SW C.B
M302 (TURN TABLE MOTOR)
MOTOR-1 C.B
M301 RF-500TB (TRAY LOADING MOTOR)
MOTOR-2 C.B
M3 (SPINDLE MOTOR)
M2 (SLED MOTOR)
SW (INSIDE LIMIT SW)
IC201 EQ AMP
IC201 (1/2) NJM 4580 E
IC201 (2/2) NJM 4580 E
LED C.B
LED902, 905 SEL1810BM
LED903, 904 SEL1550GM
LED902~905 (CD TRAY LIGHTING)
FTI02
FROM B FRONT C.B CON104
TO A MAIN C.B WH501
SUGNAL MARK
AUDIO
33.8688MHZ

## Đ ECHO/ĐSP C.B



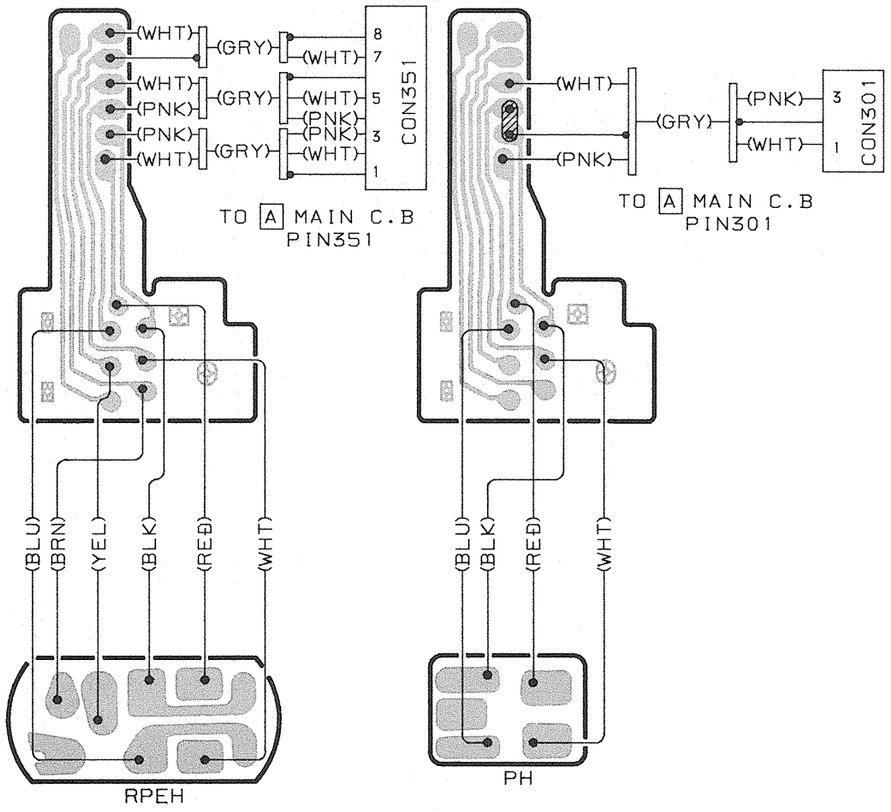


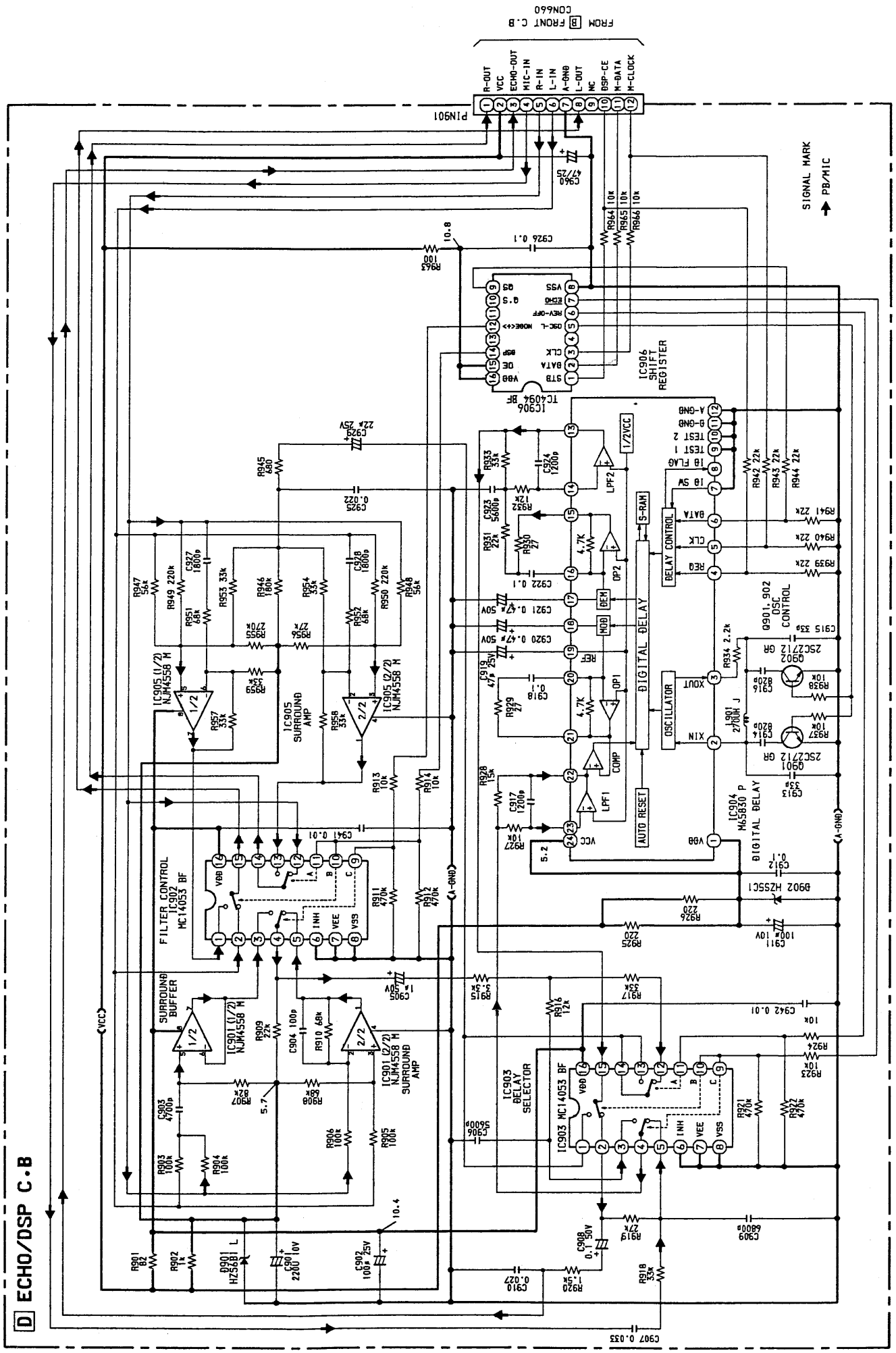

## O ĐECK-1 C.B

## P ĐECK-2 C.B

## R RELAY-2 C.B Q RELAY-1 C.B



# SCHEMATIC DIAGRAM – 5 (ECHO/DSP)



## IC DESCRIPTION

## IC,LC866432V－5492, －5506

| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 1 | O-PLL CE | O | PLL IC chip enable. |
| 2 | O-KC/CE | O | Key control IC M65840 data latched strobe output. |
| 3 | O-M/STB | O | Main shift register (IC602, 603) data latch strobe output. |
| 4 | O-M/DATA | O | Main shift register (IC602, 603), PLL/key control/DSP related data output. |
| 5 | O-M/CLK | O | Main shift register (IC602, 603), PLL/key control/DSP related clock output. |
| 6 | I-$\overline{\text{HOLD}}$ | I | Power failure detected input. "L" to stop clock and maintain memory. |
| 7 | $\overline{\text{RESET}}$ | I | Reset input. |
| 8 | I-$\overline{\text{STEREO}}$ | I | Tuner stereo detected input. |
| 9 | I-$\overline{\text{TUNE/IFC}}$ | I | Tuner $\overline{\text{SD}}$ detected input. IF count serial data input. |
| 10 | VSS1 | — | GND. |
| 11, 12 | CF1, 2 | — | 5.76MHz oscillator circuit. |
| 13 | VDD1 | — | Power supply input. |
| 14～16 | I-KEY1～3 | I | Key input. (A/D) |
| 17 | I-CD/SW | I | CD mechanical switch A/D converter input. |
| 18 | I-CD/DISH | I | CD turntable photo sensor A/D converter input. |
| 19 | I-MS | I | Deck music sensor signal input. |
| 20 | I-SPEANA | I | A/D input for spectrum analyzer display. |
| 21 | I-MIC | I | Microphone input for auto VF display. |
| 22 | I-TM BASE | I | Reference clock input for timer watch. |
| 23 | I-CD/SENSE | I | CD IC control SENS input. |
| 24 | I-$\overline{\text{RMC}}$ | I | System remote control signal input. |
| 25～36 | G12～G1 | O | FL grid output G12～G1. |
| 37 | P22 | O | FL segment output P22. |
| 38 | P21/O-SPEANA A | O | FL segment output P21, spectrum analyzer band switch output (A). |
| 39 | P20/O-SPEANA B | O | FL segment output P20, spectrum analyzer band switch output (B). |
| 40 | P19/O-SPEANA C | O | FL segment output P19, spectrum analyzer band switch output (C). |
| 41 | VDD2 | — | Power supply input. |
| 42 | -VP | — | Power supply input (-34.5V) for FL display. |
| 43 | P18/CST1 | I/O | FL segment output P18, DECK1 cassette detect switch data input. |
| 44 | P17/AUTO1 | I/O | FL segment output P17, DECK1 auto stop signal input. |
| 45 | P16/CAM1 | I/O | FL segment output P16, DECK1 cam switch data input. |
| 46 | P15/CSM2 | I/O | FL segment output P15, DECK2 cam switch data input. |
| 47 | P14/AUTO2 | I/O | FL segment output P14, DECK2 auto stop data input. |
| 48 | P13/CST2 | I/O | FL segment output P13, DECK2 cassette detect switch data input. |
| 49 | P12/REA2 | I/O | FL segment output P12, DECK2 side-A record OK switch data input. |
| 50 | P11/REB2 | I/O | FL segment output P11, DECK2 side-B record OK switch data input. |
| 51 | P10/FM-WIDE | I/O | FL segment output P10, FM wide mode data input to diode. |
| 52 | P1/AM-ST | I/O | FL segment output P1, AM stereo mode data input to diode. |
| 53 | P2/AM10K | I/O | FL segment output P2, AM 10kHz step data input to diode. |

| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 54 | P3/LW | I/O | FL segment output P3, LW mode data input to diode. |
| 55 | P4/SW | I/O | FL segment output P4, SW mode data input to diode. |
| 56 | P5/BBE | I/O | FL segment output P5, BBE mode data input to diode. |
| 57 | P6/DSP | I/O | FL segment output P6, DSP data input to diode. |
| 58 | P7/K-CON | I/O | FL segment output P7, key control data input to diode. |
| 59 | P8/CDG | I/O | FL segment output P8, CDG data input to diode. |
| 60 | P9/OIRT | O | FL segment output P9. |
| 61 | O-CLOSE | O | CD tray close data output. |
| 62 | O-OPEN | O | CD tray open data output. |
| 63 | O-DI/R | O | CD turntable reverse rotation output. |
| 64 | O-DI/F | O | CD turntable forward rotation output. |
| 65 | O-$\overline{\text{POWER}}$ | O | System power supply $\overline{\text{ON}}$/OFF output. |
| 66 | O-$\overline{\text{SOL1}}$ | O | DECK1 solenoid output. |
| 67 | O-$\overline{\text{SOL2}}$ | O | DECK2 solenoid output. |
| 68 | O-$\overline{\text{MOTOR}}$ | O | DECK motor output. |
| 69 | O-$\overline{\text{KEY. SCAN}}$ | O | Switch scan timing output. |
| 70 | O-F/STB | O | Front shift register (IC401~403), data latch strobe output. |
| 71 | O-F/CLK | O | Front shift register (IC401~403), data transfer clock output. |
| 72 | O-F/DATA | O | Front shift register (IC401~403), data output. |
| 73 | VSS2 | — | GND. |
| 74 | O-DSP/CE | O | DSP related data latch strobe output. |
| 75 | O-CD/DATA | O | CD IC control data output. |
| 76 | O-CD/XLT | O | CD IC control data latch output. |
| 77 | O-CD/CLK | O | CD IC control data transfer clock output. |
| 78 | I-CD/SQ. DATA | O | CD SUB-Q data input. |
| 79 | O-CD/SQ. CLK | O | Clock output for CD SUB-Q input data. |
| 80 | O-MUTE | O | System mute output. |

## IC,CXD2518Q

| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 1 | SCOR | O | 1H when the subcode sync S0 or S1 is detected. (Not used) |
| 2 | SBSO | O | SUBP~W serial output. (Not used) |
| 3 | EXCK | I | Clock input for SBSO read out. |
| 4 | SQSO | O | SUBQ 80-bit serial output. |
| 5 | SQCK | I | Clock input for SQSO read out. |
| 6 | MUTE | I | "H" to mute. "L" to cancel. Connected to GND. |
| 7 | SENS | O | SENS signal output to CPU (IC201). |
| 8 | XRST | I | System reset. "L" to reset. |
| 9 | DATA | I | Serial data input from CPU (IC201). |
| 10 | XLAT | I | Latch input from CPU (IC201). Latching serial data at fall down. |
| 11 | CLOK | I | Clock input from CPU (IC201) to transfer serial data. |
| 12 | VSS | — | GND. |
| 13 | SEIN | I | SENS input from SSP (CXA1782BQ). |
| 14 | CNIN | I | Numbers of track jump are counted and input. |
| 15 | DATO | O | Serial data output to SSP (CXA1782BQ). |
| 16 | XLTO | O | Serial data latched output to SSP (CXA1782BQ). Latched at fall down edge. |
| 17 | CLKO | O | Clock input from SSP (CXA1782BQ) to transfer serial data. |
| 18 | TEST2 | I | TEST. (Connected to +5V) |
| 19~21 | SPOB~D | I | Input from INSIDE LIMIT switch (SW1). |
| 22 | XLON | O | LC7870E mute control output. (Not used) |
| 23 | FOK | I | Focus OK input pin. Used for SENS output and servo auto sequencer. |
| 24 | MON | O | Spindle motor ON/OFF control output. |
| 25 | MDP | O | Spindle motor servo control output. |
| 26 | MDS | O | Spindle motor servo control output. (Not used) |
| 27 | LOCK | O | GFS is sampled by 460Hz. H output when GFS is H. L output when GFS is L for 8 consecutive times. |
| 28 | TEST1 | I | TEST. (Connected to GND) |
| 29 | FILO | O | Filter output to master PLL. (slave=digital PLL) |
| 30 | FILI | I | Filter input to master PLL. |
| 31 | PCO | O | Charge-pump output to master PLL. |
| 32 | VDD | — | Power supply input. (+5V) |
| 33 | AVSS1 | — | GND. |
| 34 | CLTV | I | VCO control voltage input to master PLL. |
| 35 | AVDD1 | — | Power supply input. (+5V) |
| 36 | RF | I | EFM signal input. |
| 37 | BIAS | I | Constant current input to asymmetry correction circuit. |
| 38 | ASYI | I | Comparate voltage input to asymmetry correction circuit. |
| 39 | ASYO | O | EFM full swing output. (L=VSS, H=VDD) |
| 40 | ASYE | I | L: asymmetry correction OFF. H: asymmetry correction ON (connected to +5V) |
| 41 | WDCK | O | D/A interface, word clock (2Fs) for 48-bit slot. (Not used) |
| 42 | LRCK | O | D/A interface, LR clock (Fs) for 48-bit slot. |

| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 43 | LRCKI | I | LR clock input to DAC. (48-bit slot) |
| 44 | PCMD | O | D/A interface, serial data. (2's complement, MSB first) |
| 45 | PCMDI | I | Audio data input to DAC. (48-bit slot) |
| 46 | BCK | O | D/A interface, bit clock. |
| 47 | BCKI | I | Bit clock input to DAC. (48-bit slot) |
| 48 | GTOP | O | GTOP output. (Not used) |
| 49 | XUGF | O | XUFG output. (Not used) |
| 50 | XPCK | O | XPLCK output. (Not used) |
| 51 | GFS | O | GFS output. (Not used) |
| 52 | RFCK | O | RFCK output. (Not used) |
| 53 | VSS | — | GND. |
| 54 | C2PO | O | C2PO output. (Not used) |
| 55 | XROF | O | XRAOF output. (Not used) |
| 56 | MNT3 | O | MNT3 output. (Not used) |
| 57 | MNT1 | O | MNT1 output. (Not used) |
| 58 | MNT0 | O | MNT0 output. (Not used) |
| 59 | FSTT | O | Pins-73 and -74 divided-by 2/3 output. (Not used) |
| 60 | C4M | O | 4.2336MHz output. (Not used) |
| 61 | DOUT | O | Digital Out connector output signal. |
| 62 | EMPH | O | H when the playback disc has emphasis. "L" when it does not. |
| 63 | EMPHI | I | DAC emphasis ON/OFF. "H" when ON. "L" when OFF |
| 64 | WFCK | O | WFCK (WRITE FRAME CLOCK) output. (Not used) |
| 65 | ZEROL | O | No sound data detection output. H (L-ch) when no sound data is detected. (Not used) |
| 66 | ZEROR | O | No sound data detection output. H (R-ch) when no sound data is detected. (Not used) |
| 67 | DTSI | I | TEST for DAC. (Connected to GND) |
| 68 | VDD | — | Power supply input. (+5V) |
| 69 | LPWM | O | L-ch PWM output. (normal polarity) |
| 70 | NLPWM | O | L-ch PWM output. (reversed polarity) |
| 71 | AVDD2 | — | Power supply input to L-ch PWM driver. (Connected to +5V) |
| 72 | AVDD3 | — | Power supply input to X'tal. (Connected to +5V) |
| 73 | XTAI | I | X'tal input to 33.8688MHz oscillator circuit. |
| 74 | XTAO | O | 33.8688MHz X'tal oscillator circuit output. |
| 75 | AVSS1 | — | Power supply input to X'tal. (Connected GND) |
| 76 | AVSS2 | — | Power supply input to PWM driver. (Connected to GND) |
| 77 | NRPWM | O | R-ch PWM output. (reversed phase) |
| 78 | RPWM | O | R-ch PWM output. (normal phase) |
| 79 | DTS2 | I | TEST-2 for DAC. (Connected to GND) |
| 80 | DTS3 | I | TEST-3 for DAC. (Connected to GND) |

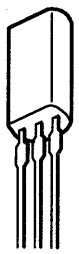
## IC,CXA1782BQ

| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 1 | FEO | O | Focus error amplifier output pin. This pin is connected to the FZC comparator input internally. |
| 2 | FEI | I | Focus error input pin. |
| 3 | FDFCT | I | Capacitor connection pin for time constant used when there is defect. |
| 4 | FGD | I | Corrects the focus servo high frequency gain. |
| 5 | FLB | I | This is a pin where the time constant is externally connected to raise the low frequency gain of the focus servo. |
| 6 | FEO | O | Focus drive output. |
| 7 | FEM | I | Focus amplifier inverted input pin. |
| 8 | SRCH | I | This is a pin where the time constant is externally connected to generate the focus search waveform. |
| 9 | TGU | I | This is a pin where the selection time constant is externally connected to set the tracking servo the high frequency gain. |
| 10 | TG2 | I | This is a pin where the selection time constant is externally connected to set the tracking high frequency gain. |
| 11 | FSET | I | Pin for setting peak of the phase compensator of the focus tracking. |
| 12 | TAM | I | Tracking amplifier inverted input pin. |
| 13 | TAO | O | Tracking drive output. |
| 14 | SLP | I | Sled amplifier non-inverted input pin. |
| 15 | SLM | I | Sled amplifier inverted input pin. |
| 16 | SLO | O | Sled drive output. |
| 17 | ISET | I | The current which determines height of the focus search, track jump and sled kick is input. |
| 18 | VCC | — | + 5 V power supply pin. |
| 19 | CLK | I | Serial data transfer clock input from CPU (CXD2518Q). |
| 20 | XLT | I | Latch input from CPU (CXD2518Q). |
| 21 | DATA | I | Serial data input from CPU (CXD2518Q). |
| 22 | XRST | I | Reset input pin. Reset at L. |
| 23 | COUT | O | Signal output to count the number of tracks. |
| 24 | SENS | O | FZC, DFCT, TZC, Gain or BAL is output depending on the command from CPU (CXD2518Q). |
| 25 | FOK | O | Output pin of the focus OK comparator. |
| 26 | CC2 | O | Input pin where the DEFECT bottom hold output is capacitance coupled. |
| 27 | CC1 | I | DEFECT bottom hold output pin. |
| 28 | CB | I | This is a pin where the DEFECT bottom hold capacitor is connected. |
| 29 | CP | I | This is a pin where the MIRR hold capacitor is connected and MIRR comparator non-inverted signal is input. |
| 30 | RFI | I | Input pin where the RF summing amplifier output is capacitance coupled. |
| 31 | RFO | O | RF summing amplifier output pin. (TP1) |
| 32 | RFM | I | RF summing amplifier inverted input pin. Gain of RF amplifier is determined by the resistor connected between RFO and this pin. |
| 33 | LD | O | APC amplifier output pin. |

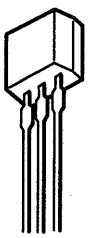
| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 34 | PHD | I | APC amplifier input pin. |
| 35~36 | PHD1~2 | I | RF I-V amplifier inverted input pin.<br>These pins are connected to the A+C and B+D pins of the optical pickup. |
| 37 | BIAS | I | Bias adjustment pin of the non-inverted side of the focus error amplifier. |
| 38~39 | F~E | I | F and E IV amplifier non-inverted input pins.<br>These pins are connected to the F and E of the optical pickup. |
| 40 | EI | — | Gain adjustment pin of the I-V amplifier E. |
| 41 | VEE | — | GND connection pin |
| 42 | TEO | O | Tracking error amplifier output pin. E-F signal is output. |
| 43 | LPFI | I | BAL adjustment comparator input pin. (Not used.) |
| 44 | TEI | I | Tracking error input pin. |
| 45 | ATSC | I | Window comparator input pin for detecting ATSC. |
| 46 | TZC | I | Tracking zero-cross comparator input pin. |
| 47 | TDFCT | I | Capacitor connection pin for the time constant used when there is defect. |
| 48 | VC | O | DC voltage output pin of VREF. (VDD/2) |

## TRANSISTOR ILLUSTRATION

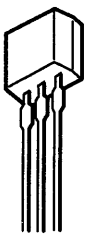
2SA952 2SC3266
2SA1015 2SC3331
2SA1296 2SD655
2SA1318 KTA1266
2SC1815 KTC3198
2SC2001




2SK246




2SA933S
2SC1740
DTA114YS
DTA144ES
DTC114YS

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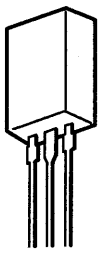
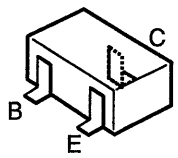
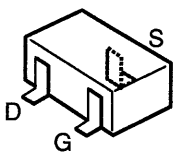



2SB1329R




2SA1162 DTA144EK
2SC2712 DTA144WK
2SC2714 DTC114YK
2SC3326 DTC143XK
DTA114TK DTC144EK
DTA143EK

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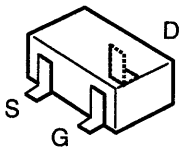


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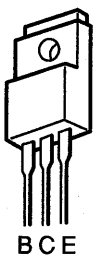
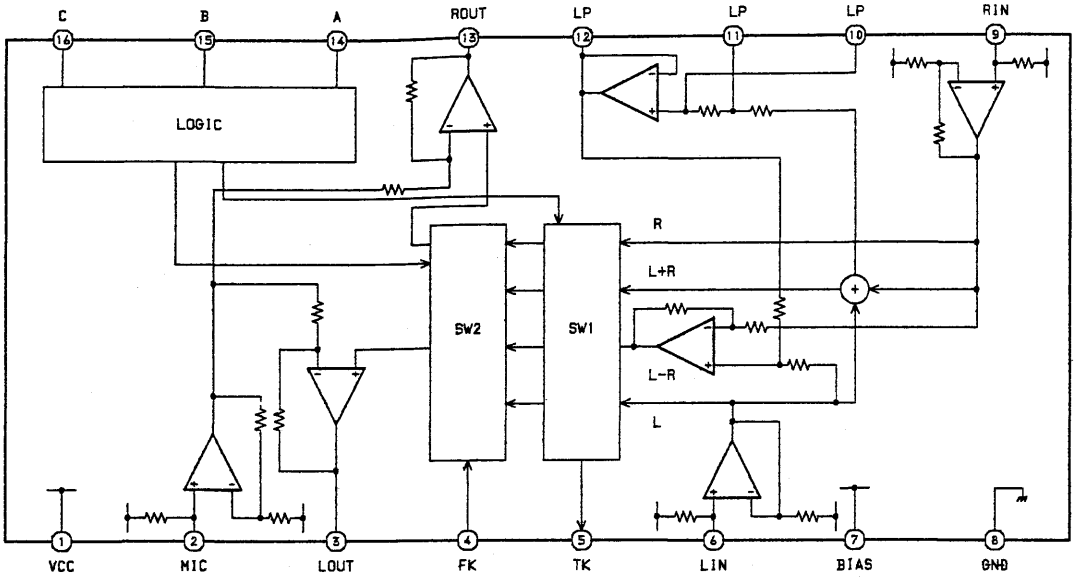


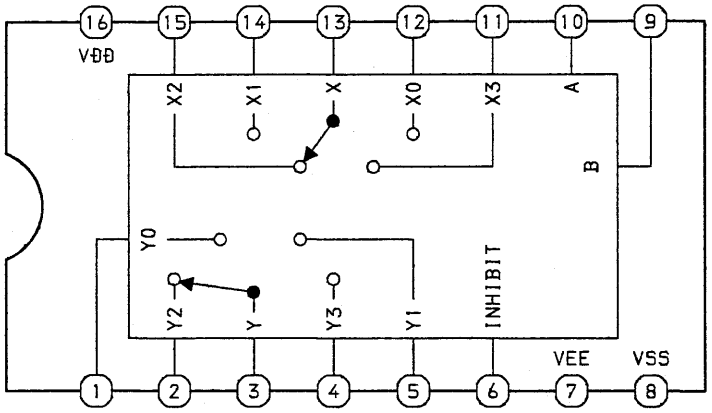

2SB1370

# IC BLOCK DIAGRAM

## IC,BA3837




## IC,TC4052

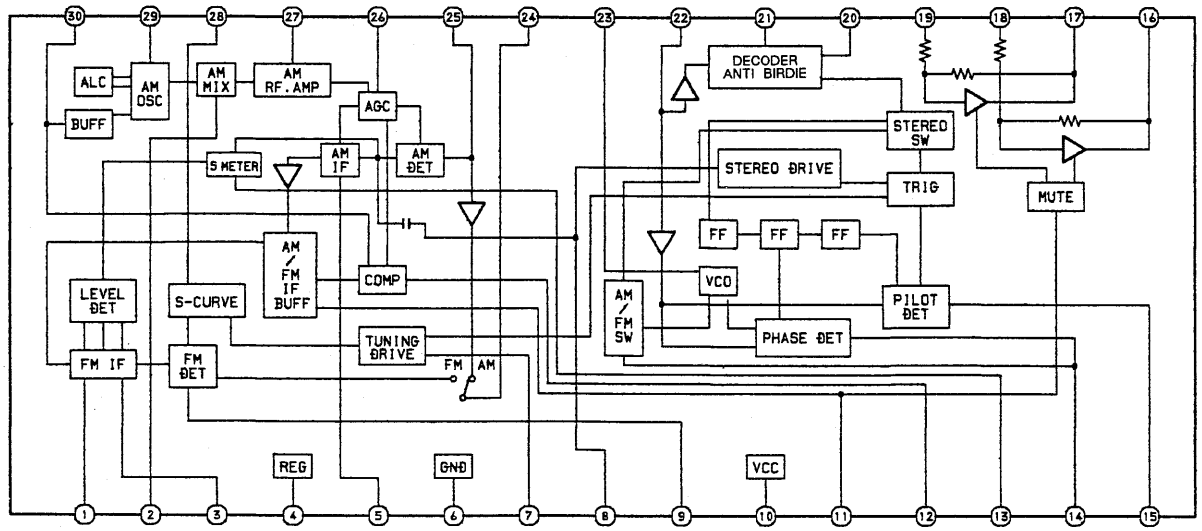



## TRUTH TABLE

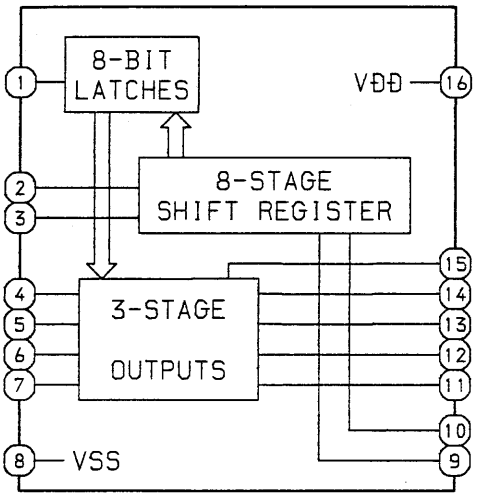
| CONTROL INPUTS | | | ON SWITCH | |
|---|---|---|---|---|
| INHIBIT | B | A | | |
| L | L | L | Y0 | X0 |
| L | L | H | Y1 | X1 |
| L | H | L | Y2 | X2 |
| L | H | H | Y3 | X3 |
| H | X | X | — | — |

L:LOW LEVEL
H:HIGH LEVEL
H:IRRELEVANT

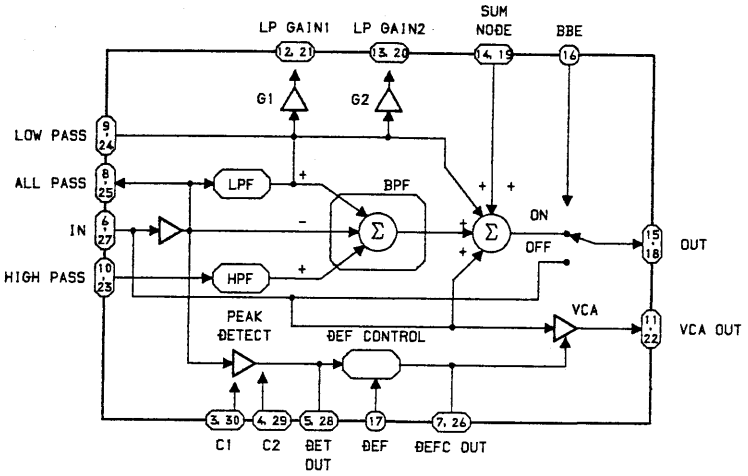
## IC,LA1836



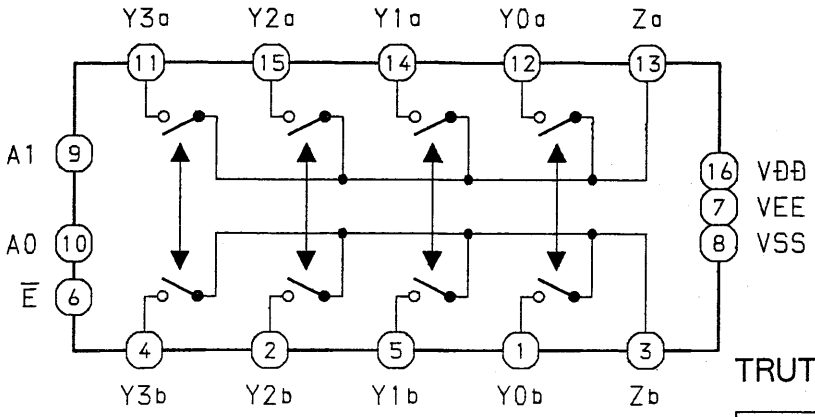
## IC,TC4094BP




## IC,XR – 1071CP




## IC,GD4052




PIN NAMES

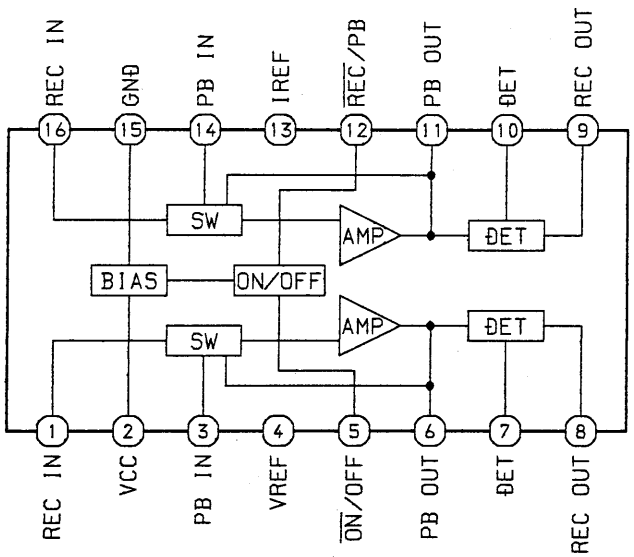
| | |
|---|---|
| Y0a - Y3a | Independent Inputs/Outputs |
| Y0b - Y3b | Independent Inputs/Outputs |
| A1, A1 | Address Inputs |
| $\overline{E}$ | Enable Input (Active LOW) |
| Za, Zb | Common Input/Output |

### TRUTH TABLE

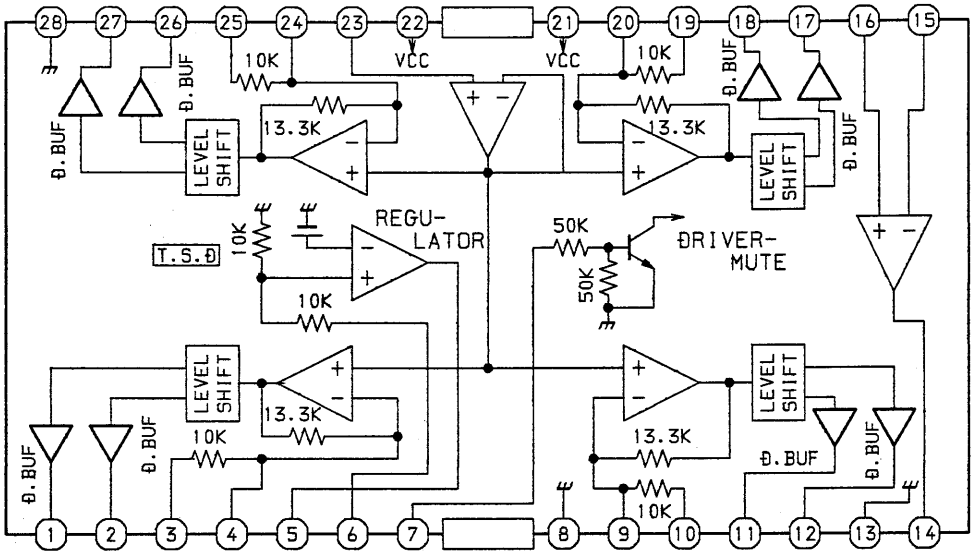
| INPUTS | | | CHANNELS | | | |
|---|---|---|---|---|---|---|
| E | A1 | A0 | Y0-Z | Y1-Z | Y2-Z | Y3-Z |
| L | L | L | ON | OFF | OFF | OFF |
| L | L | H | OFF | ON | OFF | OFF |
| L | H | L | OFF | OFF | ON | OFF |
| L | H | H | OFF | OFF | OFF | ON |
| H | X | X | OFF | OFF | OFF | OFF |

L:LOW Level, H:HIGH Level, X:Don't care

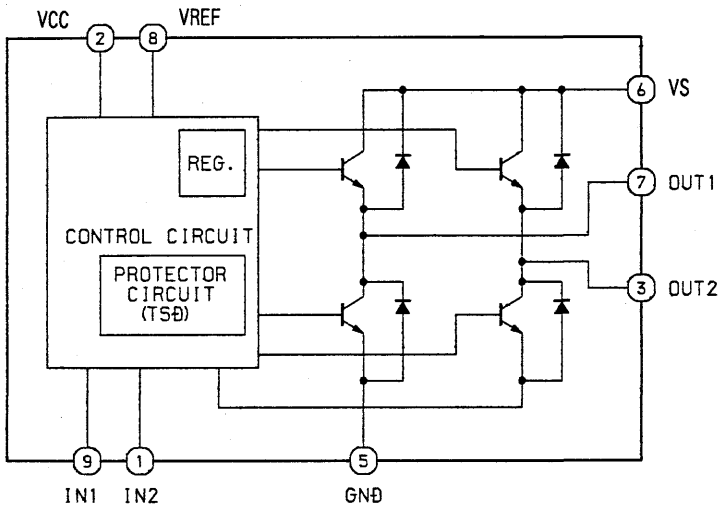
## IC,HA12134A



## IC, BA6397FP




## IC, TA7291

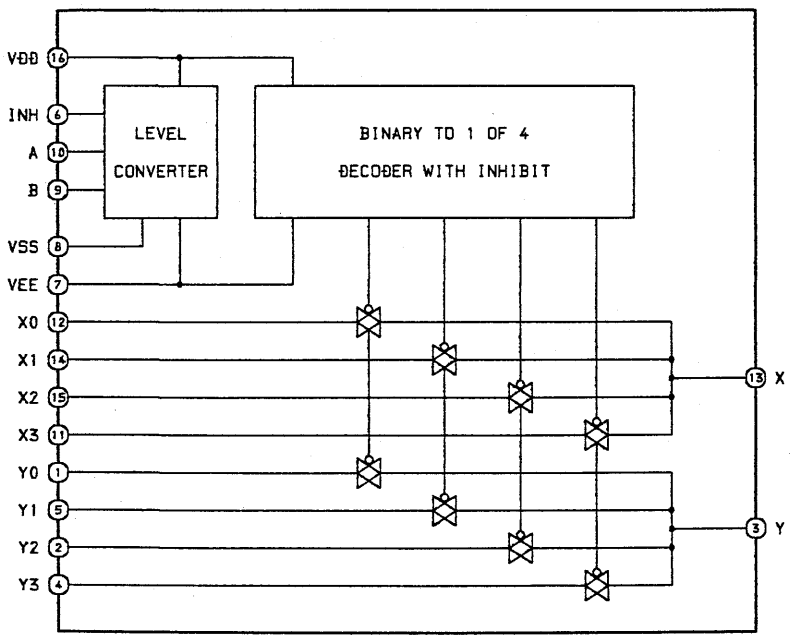



## TRUTH TABLE

| INPUT | | OUTPUT | | MOÐE |
|---|---|---|---|---|
| IN1 | IN2 | OUT1 | OUT2 | |
| 0 | 0 | ∞ | ∞ | STOP |
| 1 | 0 | H | L | CW |
| 0 | 1 | L | H | CCW |
| 1 | 1 | L | L | BRAKE |

∞ : HI IMPEÐANCE
NOTE : INPUT "H" ACTIVE

## IC, BU4052B

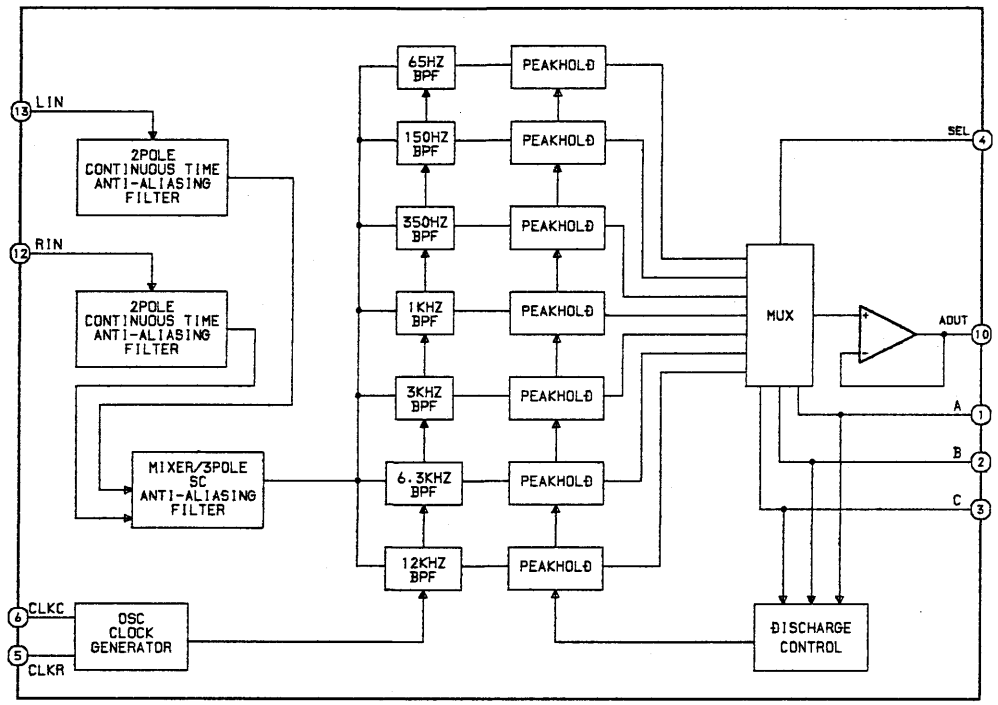



## TRUTH TABLE

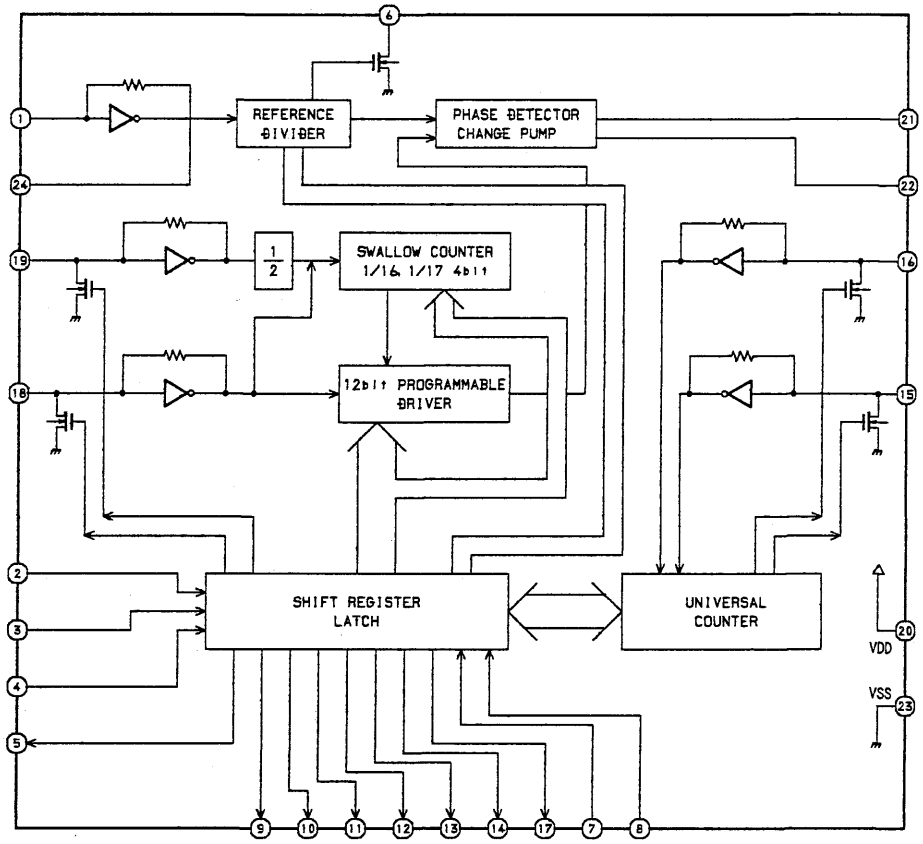
| INHIBIT | A | B | ON SWITCH |
|---|---|---|---|
| L | L | L | X0 Y0 |
| L | H | L | X1 Y1 |
| L | L | H | X2 Y2 |
| L | H | H | X3 Y3 |
| H | X | X | NONE |

X:ÐON'T CARE.

IC,XR1090

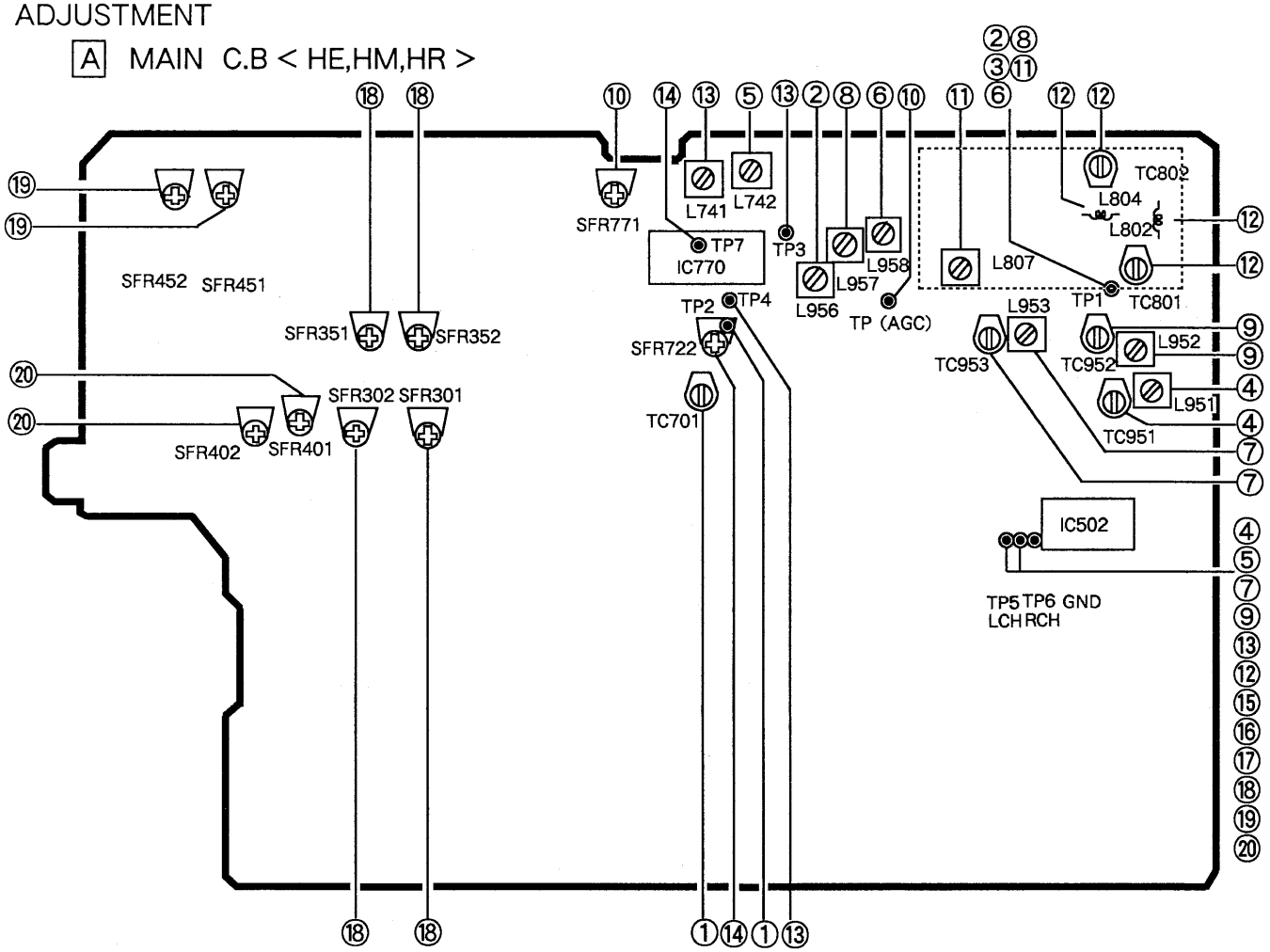



IC,LC7218

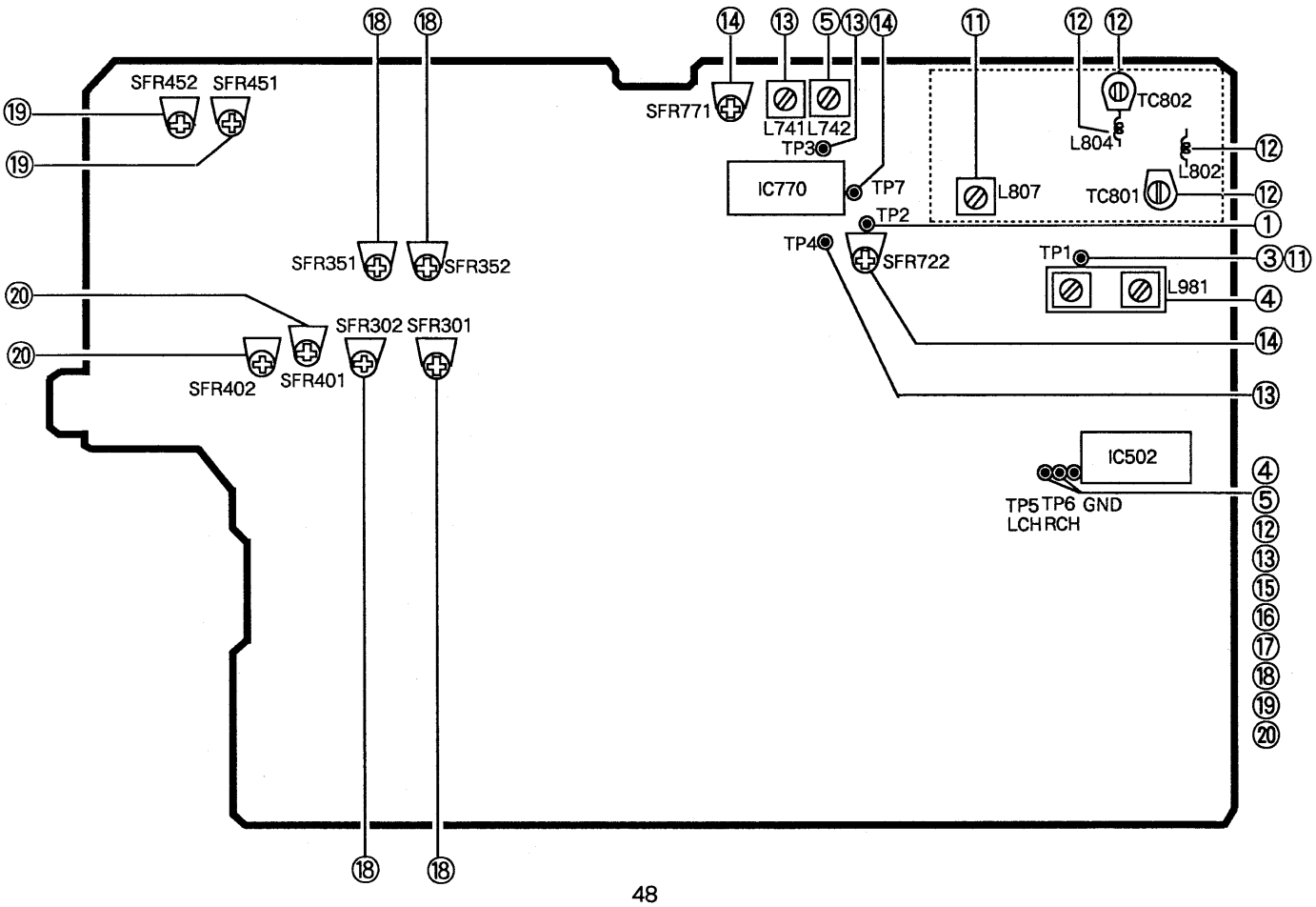


ADJUSTMENT

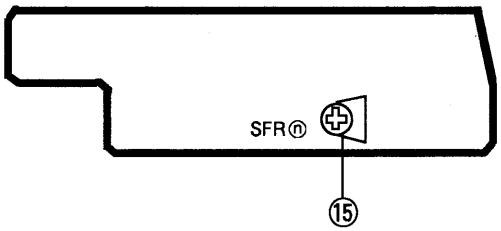
## A MAIN C.B < HE,HM,HR >



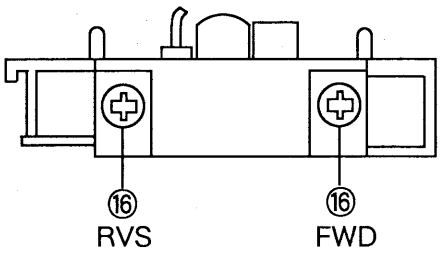

## A MAIN C.B < LH >



P DECK2 C.B




DECK1 P, DECK2 R/P/E HEAD




## ①TUNER SECTION

1. Clock Frequency Adjustment
   Settings : • Test point : TP2 (CLK IC770 pin30)
   • Adjustment location : TC701
   Method : Set to AM 1710kHz and adjust TC701 so that the test point becomes 2160kHz ± 0.01kHz.

2. AM VT Adjustment < HE,HR,HM >
   Settings : • Test point : TP1 (VT)
   • Adjustment location : L956
   Method : Set to AM 1710kHz adjust L956 so that the test point becomes 8.5V ± 0.05V. Then set to AM 530kHz and check that the test point is more than 0.4V.

3. AM VT Check < LH >
   Settings : • Test point : TP1 (VT)
   Method : Set to AM 1710kHz and check that the test point is 6.5 ± 1.0V.

4. AM Tracking Adjustment
< HE,HR,HM >
   Settings : • Test point : TP5,TP6
   • Adjustment location :
   L951 ····· 600kHz
   TC951 ····· 1400kHz
   Method : Set up TC951 to center before adjustment. The level at 600kHz is adjusted to MAX by L951. Then the level at 1400kHz is done by TC951.
< LH >
   Settings : • Test point : TP5,TP6
   • Adjustment location : L981
   Method : Set to AM 1000kHz and adjust L981 that the test point becomes maximum.

5. AM IF Adjustment
   Settings : • Test point : TP5,TP6
   L742 ····· 450kHz

6. SW − 2 VT Adjustment < HE,HR,HM >
   Settings : • Test point : TP1 (VT)
   • Adjustment location : L958
   Method : Set to SW − 2 21.85MHz adjust L958 so that the test point becomes 8.0V ± 0.05V.

7. SW − 2 Tracking Adjustment < HE,HR,HM >
   Settings : • Test point : TP5,TP6
   • Adjustment location :
   L953 ····· 9.5MHz
   TC953 ····· 21.85MHz
   Method : Set up TC953 to center before adjustment. The level at 9.5MHz is adjusted to MAX by L953 .Then the level at 21.85MHz is done by TC953.

8. SW − 1 VT adjustmant < HE,HR,HM >
   Settings : • Test point : TP1 (VT)
   • Adjustment location : L957
   Method : Set to SW − 1 7.3MHz and adjust L957 so that the test point becomes 7.5V ± 0.05V.

9. SW − 1 Tracking Adjustment < HE,HR,HM >
   Settings : • Test point : TP5,TP6
   • Adjustment location :
   L952 ····· 3.2MHz
   TC952 ····· 7.3MHz
   Method : Set up TC952 to center before adjustment. The level at 3.2MHz is adjusted to MAX by L952. Then the level at 7.3MHz is done by TC952.

10. AGC Adjustment < HE,HR,HM >
   Settings : • Test point : TP (AGC)
   • Adjustment location : SFR771
   • Input signal : 21.85MHz 60dB
   Method : Set to SW − 2 21.85MHz adjust SFR771 so that the test point becomes 1.6V ± 0.02V.

11. FM VT Adjustment

Settings : • Test point : TP1 (VT)
• Adjustment location : L807

Method : Set to FM 87.5MHz and adjust L807 so that the test point becomes 1.7V ± 0.05V.

12. FM Tracking Adjustment

Settings : • Test point : TP5,TP6
TC801,TC802 ····· 108MHz
L802,L804 ····· 87.5MHz

13. DC Balance/MONO Distortion Adjustment

Settings : • Test point : TP3,TP4 (DC balance)
TP5,TP6 (Distortion)
• Adjustment location : L741
• Input level : 54dB

Method : Set to FM 98.0MHz and adjust L741 so that the voltage between TP3 and TP4 becomes 0V ± 0.04V.
Next check that the distortion becomes less than 0.8 %.

14. Auto stop Level Adjustment

FM

Settings : • Test point : TP7
• Adjustment location : SFR722
• Input level : 18dB

Method : Set to FM 98.0MHz and adjust voltage low (about 0.01V) by SFR722. After that voltage high (about 7.0V) out by 2dB down.

AM < only LH >

Settings : • Test point : TP7
• Adjustment location : SFR771
• Input level : 55dB

Method : Set to AM 1000kHz and adjust voltage low (about 0.01V) by SFR771. After that voltage high (about 7.0V) out by 2dB down.

## TAPE SECTION

15. Tape Speed Adjustment

Settings : • Test tape : TTA-100
• Test point : TP5,TP6
• Adjustment location : SFR ⓝ

Method : Play back the test tape DECK II and adjust SFR ⓝ so that the frequency counter reads 3000Hz ± 5Hz.

16. Head Azimuth Adjustment

Settings : • Test tape : TTA-310
• Test point : TP5,TP6
• Adjustment location : Head azimuth adjustment screw

Method : Play back the 10kHz signal of the test tape and adjust screw so that the output becomes maximum. Next, perform on each FWD PLAY and REV PLAY mode.

17. PB Frequency Response Check

Settings : • Test tape : TTA-310
• Test point : TP5,TP6

Method : Play back the 315Hz and 10kHz signals of the test tape and check that the output ratio of the 10kHz signal is with respect to that of the 315Hz signal is ± 2dB.

18. PB Sensitivity Adjustment

Settings : • Test tape : TTA-200
• Test point : TP5,TP6
• Adjustment location :
(I DECK) SFR301 (Lch)
SFR302 (Rch)
(II DECK) SFR351 (Lch)
SFR352 (Rch)

Method : Play back the test tape and adjust SFRs so that the output level of the test point is 300mV.

19. REC/PB Frequency Response Adjustment

Settings : • Test tape : TTA-601
• Test point : TP5,TP6
• Input signal : 1kHz/10kHz (LINE IN)
• Adjustment location : SFR451 (Lch)
SFR452 (Rch)

Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP5,TP6 is 21mV. Record and play back the 1kHz and 10kHz signals and adjust SFRs so that the output of the 10kHz signal is 0dB~+0.5dB with respect to that of the 1kHz signal.

20. REC/PB Sensitivity Adjustment

Settings : • Test tape : TTA-601
(TTA – 600)
• Test point : TP5,TP6
• Input signal : 1kHz (LINE IN)
• Adjustment location : SFR401 (Lch)
SFR402 (Rch)

Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP5,TP6 is 21mV. Record and play back the 1kHz signal and adjust SFRs so that the output is 21mV ± 0.5dB.

## PRACTICAL SERVICE FIGURE

## TUNER SECTION

### < FM SECTION >

| | |
|---|---|
| IHF Sensitivity : | 4dB ± 6dB (87.5MHz) |
| (THD 3%) | 2dB ± 6dB (98.0MHz) |
| | 2dB ± 6dB (108.0MHz) |
| S/N 50dB Quieting sensitivity : | 32dB ± 5dB (87.5/98.0/108.0MHz) |
| Signal to noise ratio : | More than 64dB (98.0MHz) |
| Distortion : | Less than 1.2% (98.0MHz) |
| Stereo separation : | More than 25dB (98.0MHz) |
| Intermediate frequency : | 10.7MHz |

### < AM SECTION >

| | |
|---|---|
| Sensitivity : | 55dB ± 7dB (603kHz) |
| (S/N 20dB) | 53dB ± 6dB (999kHz) |
| | 53dB ± 6dB (1404kHz) |
| Distortion : | Less than 1.5% (999kHz) |
| Stereo separation : | More than 12dB (999kHz) |
| Intermediate frequency : | 450kHz |

### < SW1 SECTION >

| | |
|---|---|
| Sensitivity : | 33dB ± 4dB (3.20MHz) |
| (S/N 20dB) | 30dB ± 4dB (5.00MHz) |
| | 28dB ± 4dB (7.30MHz) |
| Distortion : | Less than 1.5% (5.00MHz) |
| Intermediate frequency : | 450kHz |

### < SW2 SECTION >

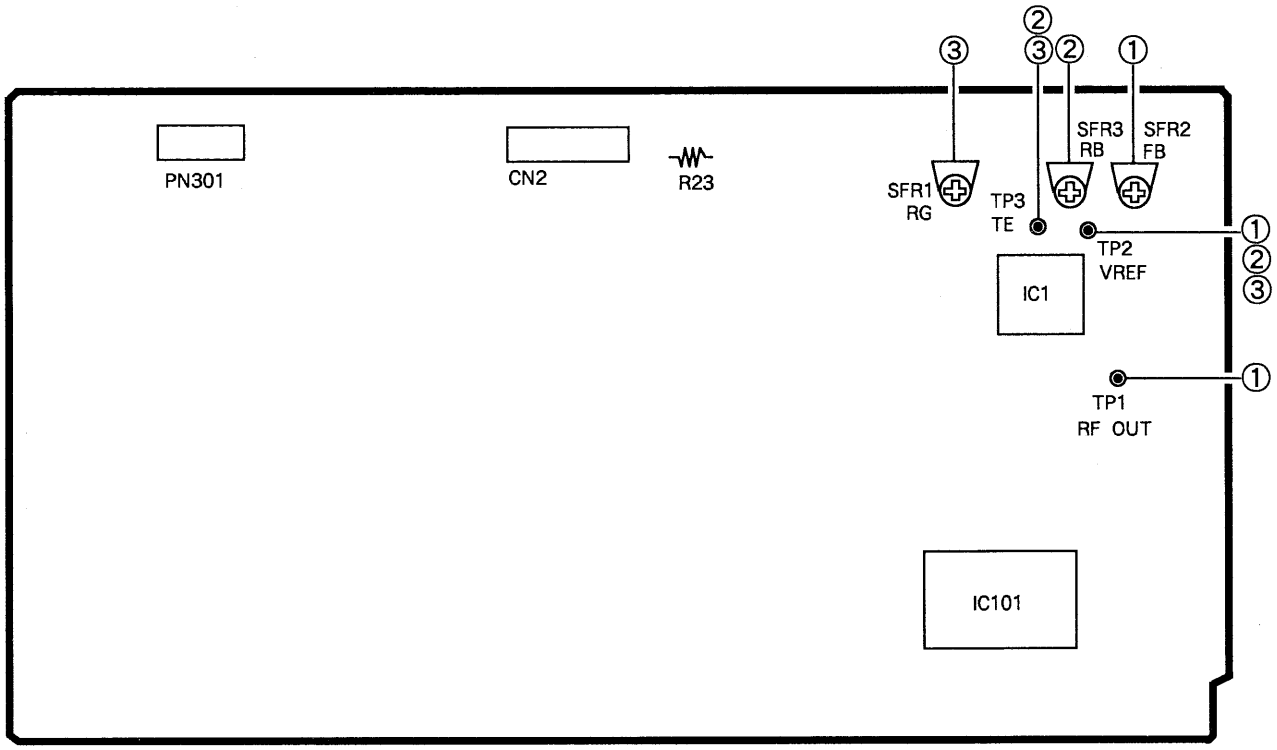
| | |
|---|---|
| Sensitivity : | 45dB ± 5dB (9.50MHz) |
| (S/N 20dB) | 40dB ± 5dB (15.00MHz) |
| | 31dB ± 5dB (21.85MHz) |
| Distortion : | Less than 1.5% (15.00MHz) |
| Intermediate frequency : | 450kHz |

## TAPE SECTION

| | |
|---|---|
| Tape speed : | 3000Hz ± 1.5% |
| Wow & flutter : | Less than 0.4% (R.M.S) |
| Take-up torque : | 30~55g-cm (FWD, REV) |
| F.F torque : | 75~180g-cm |
| Rew torque : | 75~180g-cm |
| Back tension : | 2~7g-cm |
| PB Output level : | 2.8V ± 1.5dB (SP OUT) |
| REC/PB Output level : | 2.0V ± 2.0dB (SP OUT) |
| Distortion (REC/PB) : | Less than 2% (NORM) |
| Noise level (PB) : | Less than 200mV (DOLBY B NR OFF NORM, Vol MAX.) |
| Noise level (REC/PB) : | Less than 35mV (DOLBY B NR OFF NORM, SP OUT 2V) |
| Crosstalk : | More than 60dB (1kHz, 0VU) |
| Erasing ratio : | More than 60dB (125Hz) |
| Channel separation : | More than 40dB (1kHz, 0VU) |
| REC bias frequency : | 85kHz |
| Test tape : | NORMAL TTA-601/600 |

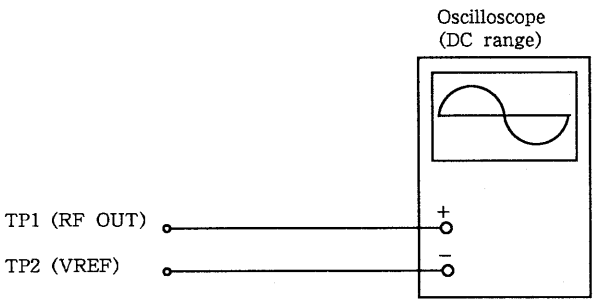
# ADJUSTMENT

## [C] 3CD C.B

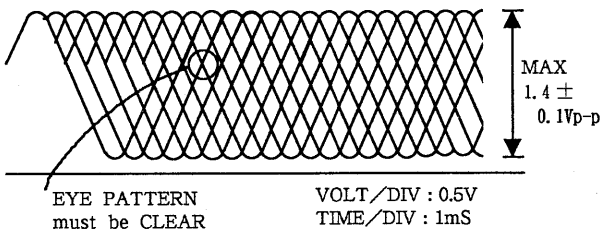



Note : Connect a probe (10 : 1) of the osilloscope or the frequency counter to a test point.

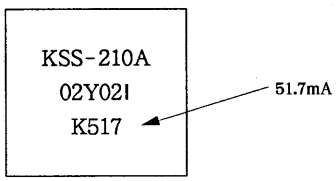
1. Focus Bias Adjustment
   Make the focus bias adjustment when replacing and repairing the optical block.




1) Connect an oscilloscope to the test points TP1 (RF) and TP2 (VREF).
2) Turn on the power switch.
3) Insert test disc TCD-782 (YEDS-18) and play back the second composition.
4) Adjust SFR2 so that RF signal of the test point TP1 (RF) is MAX and CLEARREST.

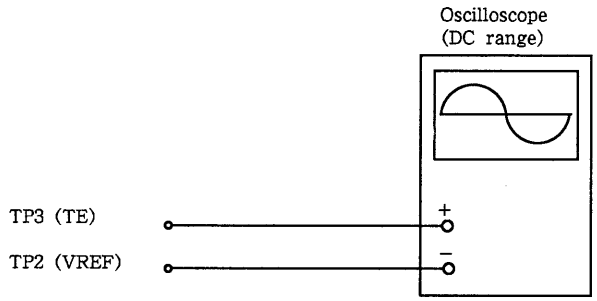



Note : The current of the laser signal can be checked with the voltages on both sides of R23 (10 Ω). The difference for the specified value shown on the lavel must be within ± 6.0mA.

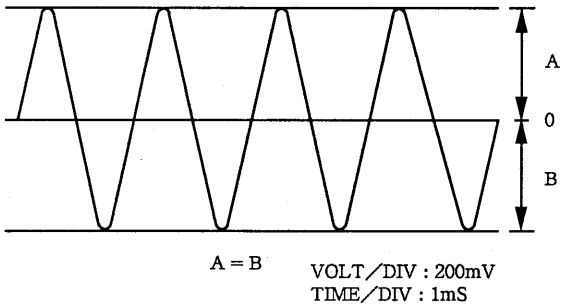



$$\text{Laser current } Iop = \frac{\text{Voltage across R23}}{10\ \Omega}$$

2. TRACKING Balance Adjustment




1) Connect an oscilloscope to the test points TP3 (TE) and TP2 (VREF).
2) Turn on the power switch.
3) Insert test disc TCD-782 (YEDS-18) and press the PLAY button.
4) Connect the intermediate point of SFR1 to TP2 (VREF).
5) Adjust SFR3 so that the waveform on the oscilloscope is vertically symmetrical as shown in the figure below.
6) After the adjustment is completed, remove the connected lead wires from the terminals.




3. TRACKING Gain Adjustment

A servo analyzer is necessary in order to perform this adjustment exactly. However, this gain has margin, so even if it is slightly off, there is no problem. Therfore, do not perform this adjustment.

Focus/tracking gain determines the pick-up follow-up (vertical and horizontal) relative to mechanical noise and mechinical shock when 2-axis device operates. However, as these reciprocate, the adjustment is at the point where both are satisfied.

- When gain is raised, the noise increases when the 2-axis device opearates.
- When gain is lowered, it is more susceptible to mechanical shock and skipping occurs more easily.

When gain adjustment is off, the symptoms below appear.

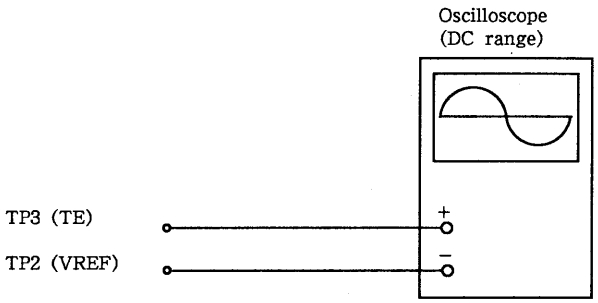
| Symptoms \ Gain | (Focus) | Tracking |
|---|---|---|
| ● The time until music starts becomes longer for STOP→▶PLAY or automatic selection (⏮ ⏭buttons pressed.) (Normally takes about 2 seconds.) | low | low or high |
| ● Music does not start and disc continues to rotate for STOP→▶PLAY or automatic selection (⏮ ⏭buttons pressed.) | − | low |
| ● Disc stops to rotate shortly after STOP→▶ PLAY. | low or high | − |
| ● Sound is interrupted during PLAY. Or time counter display stops. | − | low |
| ● More noises during the 2-axis device operation. | high | high |

The following is simple adjustment method.

− Simple adjustment −

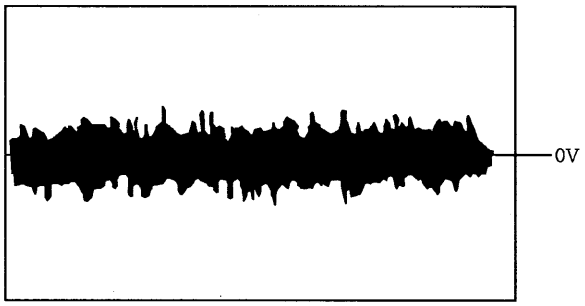
Note : Since exact adjustment cannot be performed, remember the positions of the controls before the performing the adjustment. If the positions after the simple adjustment are only a little different, return the controls to the original position.

Procedure




1) Keep the set horizontal.(If the set is not kept horizontally, this adjustment cannot be performed due to the gravity against the 2 − axis device.)
2) Insert test disc TCD-782 (YEDS-18) and play back the second composition.
3) Connect an oscilloscope to TP3 (TE) of the 3CD C.B

4) Adjust SFR1 so that the waveform appears as shown in the figure below.(tracking gain adjustment)

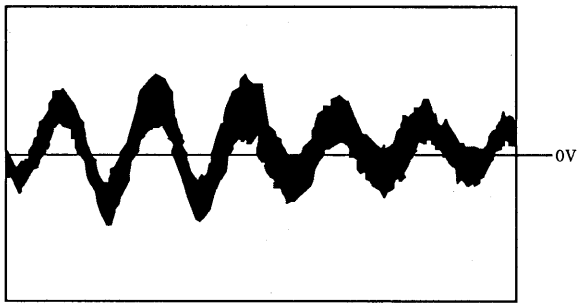



VOLT/DIV : 5mV
TIME/DIV : 1mS

● Incorrect example

Low tracking gain

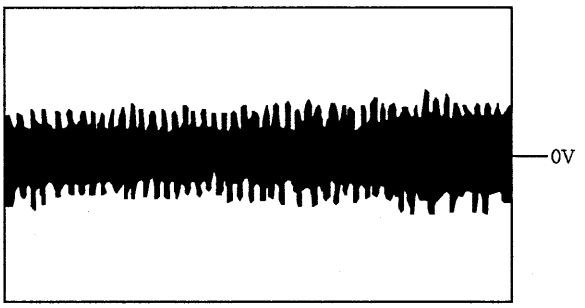
(The fundamental wave appears as compared with the waveform adjusted)




VOLT/DIV : 5mV
TIME/DIV : 1mS

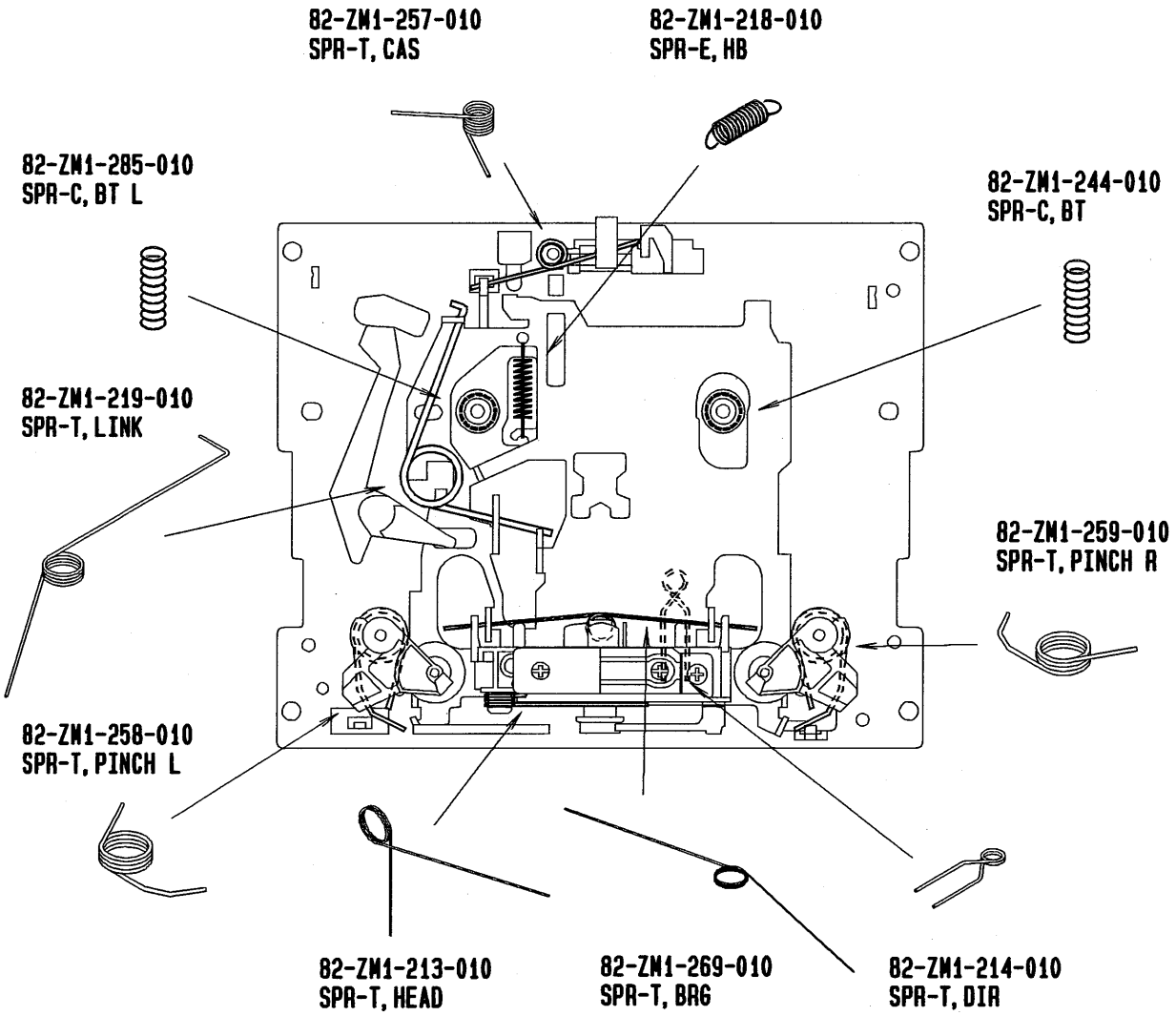
High tracking gain

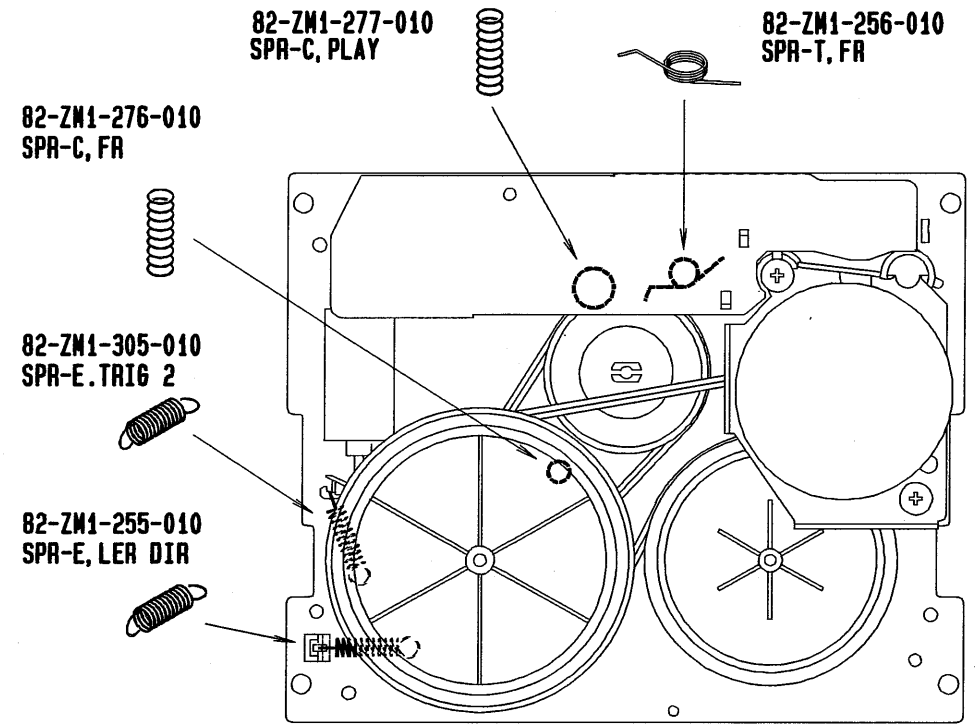
(The frequency of the fundamental wave is higher than in low gain.)



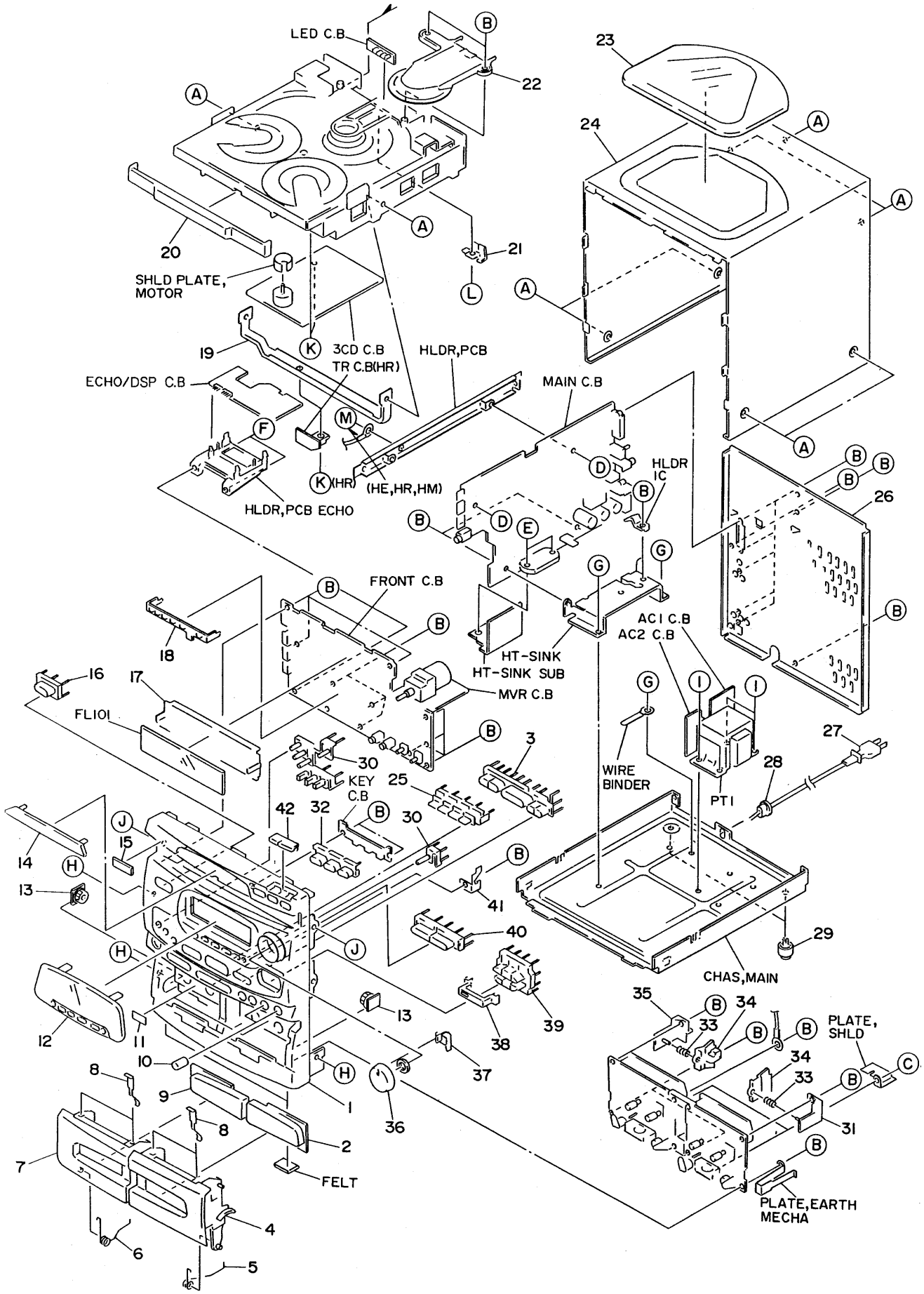

VOLT/DIV : 5mV
TIME/DIV : 1mS

SPRING APPLICATION POSITION



# MECHANICAL EXPLODED VIEW 1/2

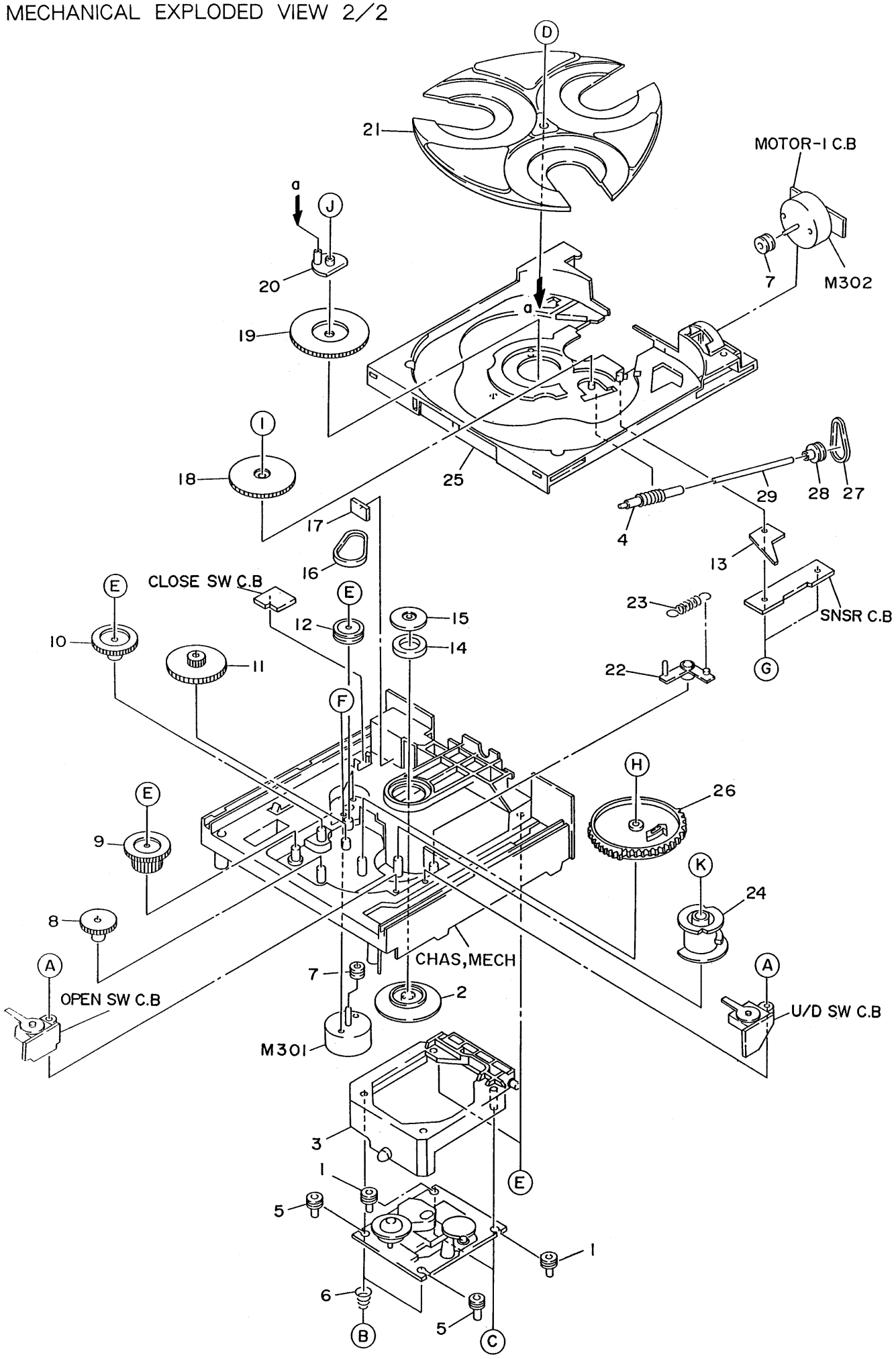


# MECHANICAL PARTS LIST 1/2

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

| REF. NO | PART NO. | ｶﾝﾘ NO. | DESCRIPTION |
|---|---|---|---|
| 1 | 83-NFF-003-010 | | CAB, FR H〈LH〉 |
| 1 | 83-NFF-019-010 | | CAB, FR HE〈HE, HR〉 |
| 1 | 83-NFF-043-010 | | CAB, FR HM〈HM〉 |
| 2 | 83-NF5-007-010 | | WINDOW, CASS 2 |
| 3 | 83-NF5-012-110 | | KEY, PLAY |
| 4 | 83-NF5-037-010 | | BOX, CASS 2 EX |
| 5 | 82-NF5-219-010 | | SPR-T, EJECT 2 (SIN) |
| 6 | 82-NF5-218-010 | | SPR-T, EJECT 1 (SIN) |
| 7 | 83-NF5-036-010 | | BOX, CASS 1 EX |
| 8 | 80-CD3-218-110 | | SPR-P CASS |
| 9 | 83-NF5-006-010 | | WINDOW, CASS 1 |
| 10 | 83-NF5-020-010 | | KNOB, MIC |
| 11 | 81-532-080-010 | | LBL, CASS-COMPT |
| 12 | 83-NFF-020-010 | | WINDOW, DISPLAY |
| 13 | 87-063-165-010 | | OIL-DMPR 150 |
| 14 | 83-NF5-022-010 | | WINDOW, CD |
| 15 | 82-NE6-067-010 | | BADGE, AIWA 30N |
| 16 | 83-NF5-013-010 | | KEY, POWER |
| 17 | 83-NF5-202-010 | | GUIDE, FL |
| 18 | 83-NF5-206-010 | | GUIDE, LED |
| 19 | 82-NF5-217-110 | | HLDR, BOTTOM |
| 20 | 83-NFF-009-010 | | PANEL, TRAY H |
| 21 | 83-NF5-034-010 | | IND, CD 2 |
| 22 | 83-NF5-023-010 | | IND, CD |
| 23 | 83-NF5-021-010 | | WINDOW, TOP |
| 24 | 83-NF5-033-010 | | CAB, STEEL HR |
| 25 | 83-NF5-014-110 | | KEY ASSY, FUN |
| 26 | 83-NFF-004-010 | | PANEL, REAR HEJBNM〈HE〉 |
| 26 | 83-NFF-044-010 | | PANEL, REAR HMB〈HM〉 |
| 26 | 83-NFF-013-010 | | PANEL, REAR HRJBNM〈HR〉 |
| 26 | 83-NFF-051-010 | | PANEL, REAR LHBNM〈LH〉 |
| 27 | 87-034-749-010 | | AC CORD (H) W/PLUG〈LH〉 |
| 27 | 87-050-034-010 | | AC CORD ASSY, E〈HE, HR, HM〉 |
| 28 | 87-085-184-010 | | BUSHING, AC CORD D〈LH〉 |
| 28 | 87-085-185-010 | | BUSHING, AC CORD E〈HE, HR, HM〉 |
| 29 | 87-085-221-010 | | FOOT, H13.5 |
| 30 | 83-NF5-025-010 | | KEY, REC |
| 31 | 82-NF5-226-010 | | HLDR, LOCK 1N |
| 32 | 83-NF5-029-110 | | KEY, DISC |
| 33 | 82-NF5-228-010 | | SPR-C, LOCK |
| 34 | 82-NF5-229-010 | | PLATE, LOCK |
| 35 | 82-NF5-227-010 | | HLDR, LOCK 2N |
| 36 | 83-NF5-009-010 | | KNOB, VOL |
| 37 | 83-NF5-010-010 | | IND, VOL |
| 38 | 83-NF5-030-010 | | PANEL, GEQ |
| 39 | 83-NF5-026-010 | | KEY, GEQ |
| 40 | 83-NFF-007-110 | | KEY, ECHO |
| 41 | 83-NF5-207-010 | | HLDR, FFC |
| 42 | 83-NF5-024-010 | | KEY, OPEN |
| A | 87-067-641-010 | | UTT2+3-8(W/O SLOT)BL |
| B | 87-067-703-010 | | BVT2+3-10 (W/O SLOT) |
| C | 87-571-032-410 | | VIT+2-3 |
| D | 87-067-633-010 | | BVT2+3-8 W CONVEX |
| E | 87-067-698-010 | | BVT2+3-18(W/O, SLOT) |
| F | 87-067-758-010 | | BVT2+3-12 W/O SLOT |
| G | 87-067-688-010 | | BVTT+3-6 |
| H | 87-591-094-410 | | QIT+3-6 |
| I | 87-078-083-010 | | BVTT SEMS+4-8SW |
| J | 87-721-097-410 | | QT2+3-12 GLD |
| K | 87-067-579-010 | | BVT2+3-8W/O SLOT |
| L | 87-741-094-410 | | UT2+3-6 |
| M | 87-741-094-410 | | UT2+3-6〈HE, HR, HM〉 |

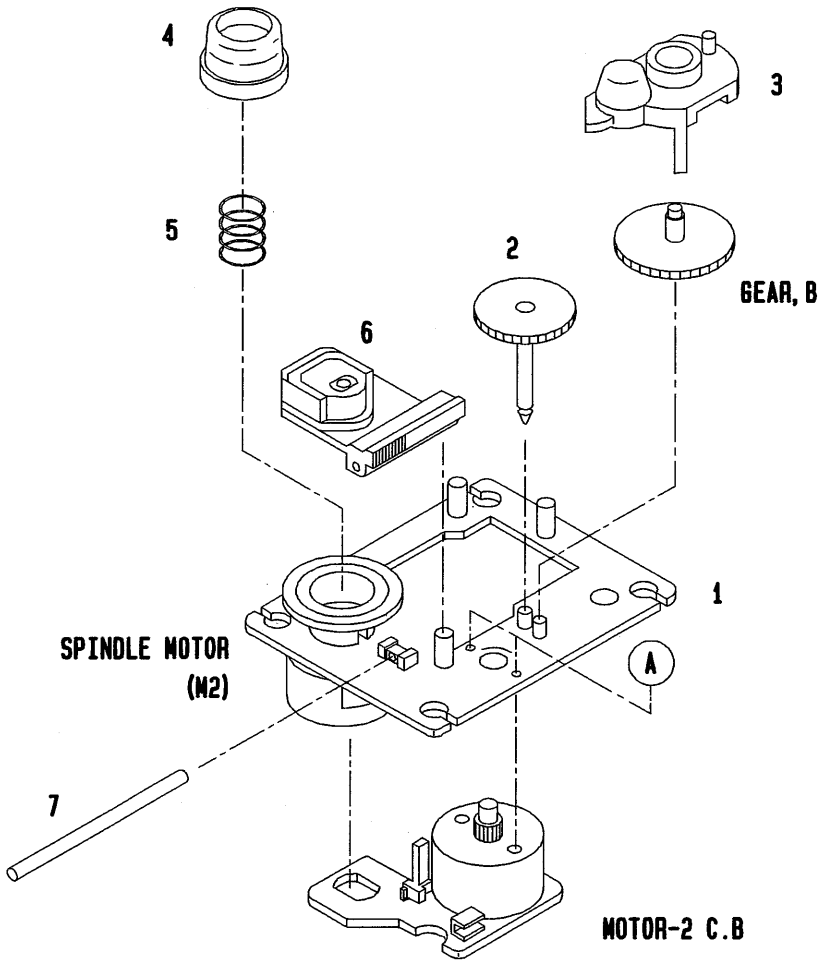
# MECHANICAL EXPLODED VIEW 2/2



# MECHANICAL PARTS LIST 2/2

| REF. NO | PART NO. | カンリ NO. | DESCRIPTION |
|---|---|---|---|
| 1 | 80-CD3-214-010 | | CUSH CD A |
| 2 | 81-ZG1-277-010 | | HLDR, MAGNET N |
| 3 | 81-ZG1-253-410 | | HLDR, MECH MK2 |
| 4 | 81-ZG1-276-110 | | WORM GEAR, TT NO2 |
| 5 | 81-ZG1-230-010 | | G-CUSH, MECH |
| 6 | 81-ZG1-231-110 | | SPR-C, MECH |
| 7 | 81-ZG1-212-010 | | PULLY, LOAD MO |
| 8 | 81-ZG1-250-010 | | GEAR, TRAY RELAY MK2 |
| 9 | 81-ZG1-019-010 | | GEAR, TRAY B YEL |
| 10 | 81-ZG1-018-010 | | GEAR, TRAY A YEL |
| 11 | 81-ZG1-017-010 | | GEAR, RELAY RED |
| 12 | 81-ZG1-014-010 | | PULLY, RELAY YEL |
| 13 | 81-ZG1-240-010 | | SPR-P, WORM |
| 14 | 87-036-326-010 | | MAGNET, CLAMPER 93 |
| 15 | 81-ZG1-285-010 | | PLATE, MAGNET N |
| 16 | 81-ZG1-232-010 | | BELT, TRAY |
| 17 | 81-ZG1-238-110 | | CUSH, TRAY IN |
| 18 | 81-ZG1-222-010 | | WORM WHEEL, TT |
| 19 | 81-ZG1-202-010 | | GEAR MAIN |
| 20 | 81-ZG1-252-010 | | LEVER, TT MK2 |
| 21 | 81-ZG1-008-210 | | TURNTABLE, NO2〈LH, HE, HR〉 |
| 21 | 81-ZG1-010-210 | | TURNTABLE, NO3〈HM〉 |
| 22 | 81-ZG1-020-010 | | PLATE, CAM BGE |
| 23 | 81-ZG1-262-010 | | SPR-E, CAM S |
| 24 | 81-ZG1-016-010 | | GEAR, MECH CAM BGE |
| 25 | 81-ZG1-024-010 | | TRAY, NO3 3NF-5 |
| 26 | 81-ZG1-015-010 | | GEAR, TRAY CAM BLU |
| 27 | 81-ZG1-233-110 | | BELT, TT |
| 28 | 81-ZG1-236-010 | | PULLY, TT MO |
| 29 | 81-ZG1-260-010 | | SHAFT, WORM S |
| A | 81-653-215-010 | | SPECIAL SCREW VT2 |
| B | 81-ZG1-254-010 | | S-SCREW, MECH HLDR |
| C | 81-ZG1-271-010 | | S-SCREW, MECH REAR |
| D | 81-ZG1-239-010 | | S-SCREW, TT |
| E | 87-067-945-110 | | VFT2+3-12(F10) |
| F | 87-251-071-410 | | U+2.6-4 |
| G | 87-067-579-010 | | BVT2+3-8W/O SLOT |
| H | 81-ZG1-264-010 | | S-SCREW, CAM |
| I | 87-761-095-410 | | VFT2+3-8 |
| J | 87-078-029-010 | | VFT2+3-13(F8) |
| K | 87-078-061-010 | | VFT2+3-20DIA10, GLD |

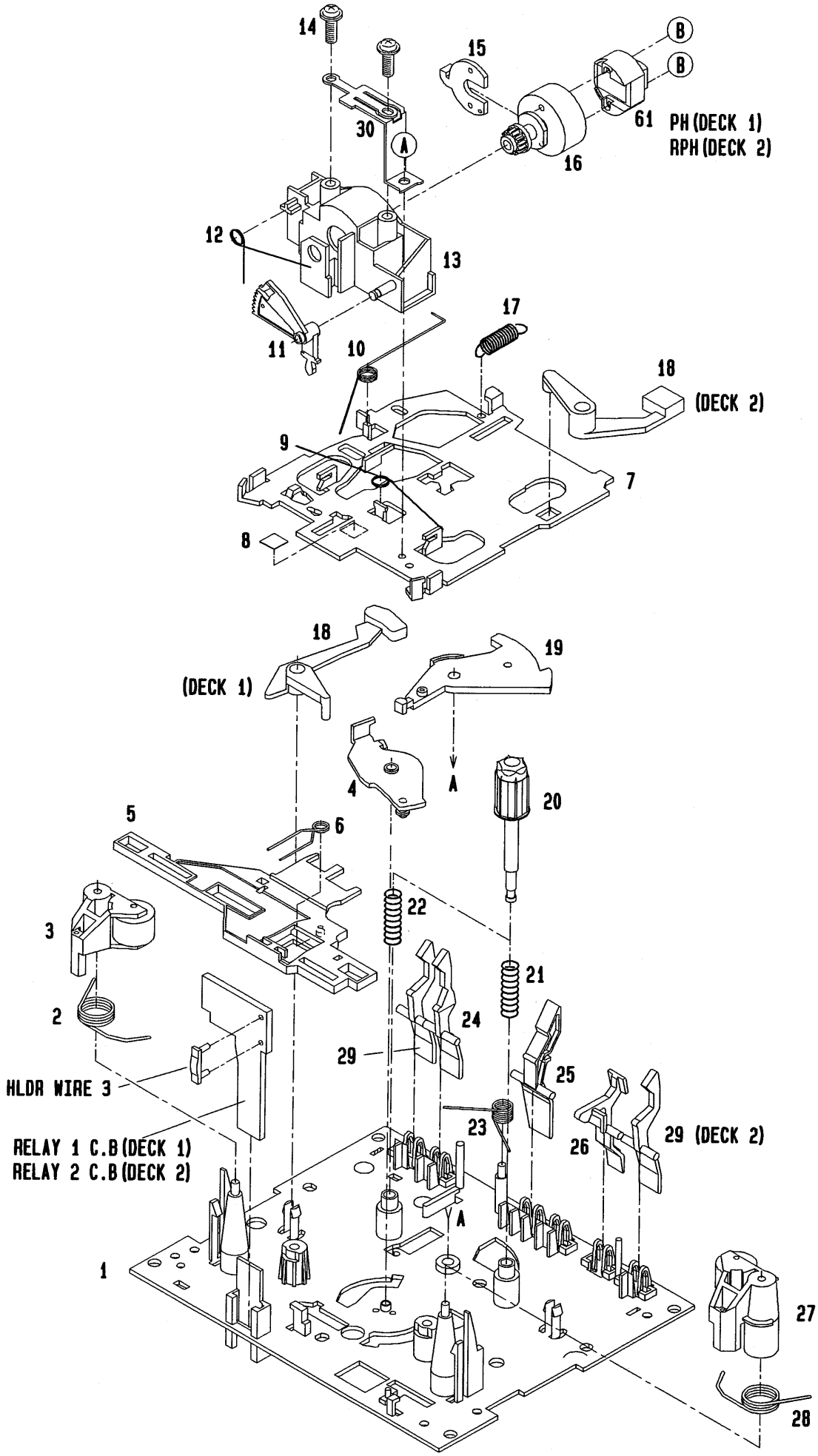
## CD MECHANISM EXPLODED VIEW 1／1

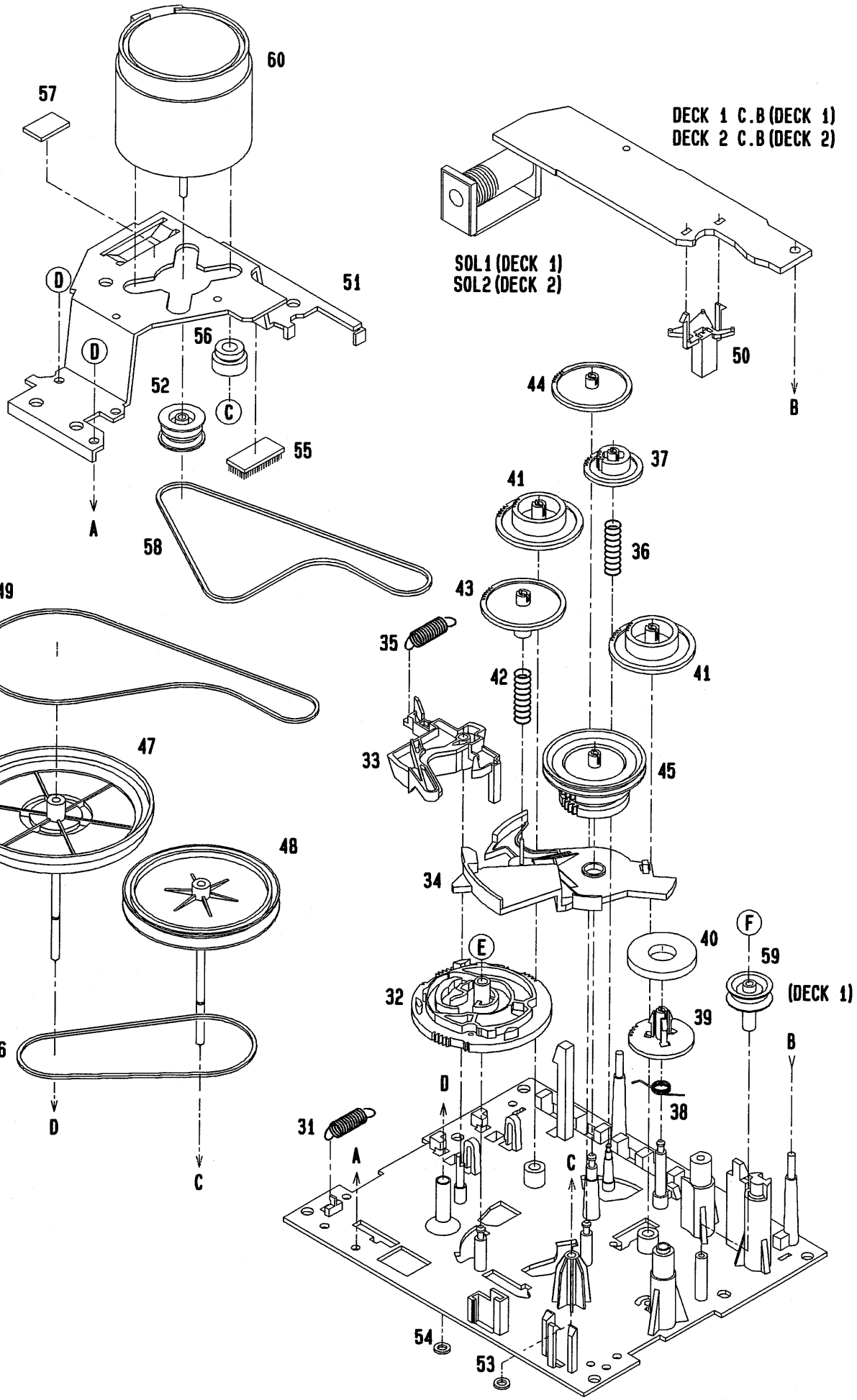



## CD MECHANISM PARTS LIST 1／1

| REF. NO | PART NO. | カンリ NO. | DESCRIPTION |
|---|---|---|---|
| 1 | 9X-262-513-310 | | T.T CHASS ASSY W/MOTOR |
| 2 | 92-625-188-020 | | GEAR(A) |
| 3 | 92-625-544-010 | | COVER |
| 4 | 92-625-187-010 | | RING CENTER |
| 5 | 92-625-191-010 | | SPRING COMPRESSION |
| 6 | 98-848-127-110 | | OPTICAL PICK UP KSS-210A |
| 7 | 94-917-565-010 | | SHAFT SLED |
| A | 87-261-032-210 | | V+2-3 |

TAPE MECHANISM EXPLODED VIEW 1/1




60
57
51
56
52
55
58
DECK 1 C.B (DECK 1)
DECK 2 C.B (DECK 2)
SOL1 (DECK 1)
SOL2 (DECK 2)
50
44
37
41
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43
35
42
41
33
45
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48
46
40
59
(DECK 1)
32
39
38
31
54
53
A
B
C
D
E
F

# TAPE MECHANISM PARTS LIST 1/1

| REF. NO | PART NO. | カンリ NO. | DESCRIPTION |
|---|---|---|---|
| 1 | 82-ZM3-214-110 | | CHAS ASSY, P (DECK 1) |
| 1 | 82-ZM1-299-010 | | CHAS ASSY, R (DECK 2) |
| 2 | 82-ZM1-258-010 | | SPR-T, PINCH L |
| 3 | 82-ZM1-248-110 | | LVR ASSY, PINCH L |
| 4 | 82-ZM1-295-210 | | PLATE ASSY, LINK |
| 5 | 82-ZM1-266-010 | | LVR, DIR |
| 6 | 82-ZM1-214-010 | | SPR-T, DIR |
| 7 | 82-ZM1-206-210 | | CHAS, HEAD |
| 8 | 87-078-014-010 | | SH, 5-5-0.05 |
| 9 | 82-ZM1-269-010 | | SPR-T, BRG |
| 10 | 82-ZM1-219-010 | | SPR-T, LINK |
| 11 | 82-ZM1-210-010 | | GEAR, H T |
| 12 | 82-ZM1-213-010 | | SPR-T, HEAD |
| 13 | 82-ZM1-207-010 | | GUIDE, TAPE |
| 14 | 82-ZM1-283-210 | | S-SCREW, AZIMUTH |
| 15 | 82-ZM1-209-010 | | PLATE, HEAD |
| 16 | 82-ZM1-208-010 | | HLDR, HEAD |
| 17 | 82-ZM1-218-010 | | SPR-E, HB |
| 18 | 82-ZM1-263-110 | | LVR, EJECT L (DECK 1) |
| 18 | 82-ZM1-264-010 | | LVR, EJECT R (DECK 2) |
| 19 | 82-ZM1-222-010 | | LVR, PLAY |
| 20 | 82-ZM1-217-110 | | REEL TABLE |
| 21 | 82-ZM1-244-110 | | SPR-C, BT |
| 22 | 82-ZM1-285-110 | | SPR-C, BT L |
| 23 | 82-ZM1-257-010 | | SPR-T, CAS |
| 24 | 82-ZM1-241-110 | | LVR, MC |
| 25 | 82-ZM1-242-010 | | LVR, CAS |
| 26 | 82-ZM1-243-010 | | LVR, STOP |
| 27 | 82-ZM1-253-110 | | LVR ASSY, PINCH R |
| 28 | 82-ZM1-259-010 | | SPR-T, PINCH R |
| 29 | 82-ZM1-240-110 | | LVR, REC (DECK 2) |
| 30 | 82-ZM1-298-010 | | SPR-P, EARTH |
| 31 | 82-ZM1-255-110 | | SPR-E, LVR DIR |
| 32 | 82-ZM1-221-110 | | GEAR, CAM |
| 33 | 82-ZM1-227-110 | | LVR, TRIG |
| 34 | 82-ZM1-224-110 | | LVR, FR |
| 35 | 82-ZM1-305-010 | | SPR-E, TRIG 2 |
| 36 | 82-ZM1-277-010 | | SPR-C, PLAY |
| 37 | 82-ZM1-223-010 | | GEAR, PLAY |
| 38 | 82-ZM1-256-110 | | SPR-T, FR |
| 39 | 82-ZM1-220-210 | | GEAR, IDLER |
| 40 | 80-ZM6-217-010 | | RING MAGNET 2 |
| 41 | 82-ZM1-216-210 | | GEAR, REEL |
| 42 | 82-ZM1-276-010 | | SPR-C, FR |
| 43 | 82-ZM1-225-010 | | GEAR, FR |
| 44 | 82-ZM1-226-010 | | GEAR, REW |
| 45 | 82-ZM1-228-210 | | SLIP DISK ASSY |
| 46 | 82-ZM1-261-110 | | BELT, FR |
| 47 | 82-ZM1-237-210 | | FLY-WHL ASSY, R (DECK 2) |
| 47 | 82-ZM3-209-110 | | FLY-WHL ASSY, R2 (DECK 1) |
| 48 | 82-ZM1-234-110 | | FLY-WHL ASSY, L (DECK 2) |
| 48 | 82-ZM3-207-210 | | FLY-WHL ASSY, L2 (DECK 1) |
| 49 | 82-ZM3-206-010 | | BELT, R |
| 50 | 82-ZM1-245-210 | | HLDR, IC |
| 51 | 82-ZM3-201-010 | | HLDR, MC |
| 52 | 82-ZM3-202-010 | | PULLEY, MOT 2M |
| 53 | 82-ZM1-288-010 | | SH, 1.63-3.2-0.5 SLT |
| 54 | 80-ZM6-243-010 | | SH, 1.75-3.6-0.5 SLT |
| 55 | 80-ZM6-230-010 | | SH, BELT |
| 56 | 86-575-242-010 | | CUSH-G, DIA3.7-9-3.2 |
| 57 | 86-575-361-010 | | CUSH-G, 6-8-0.8 |
| 58 | 82-ZM3-205-010 | | BELT, L |
| 59 | 82-ZM3-204-010 | | PULLEY, COUPLER (DECK 1) |
| 60 | 87-045-347-010 | | MOT, SHU2L 70(M1) |
| 61 | 87-046-355-010 | | HEAD, PH HADKH2529B(PH) |
| 61 | 87-046-356-010 | | HEAD, RPH HADKH5581B(RPH) |
| A | 87-585-036-410 | | UIT+2-8 |
| B | 80-ZM6-207-010 | | V+1.6-7 |
| C | 82-ZM1-309-010 | | S-SCRW, MOTOR |
| D | 87-067-178-010 | | VTT+2.6-3 |
| E | 87-067-932-010 | | PW, 2.15-6.8-0.5 SLT |
| F | 87-067-972-010 | | PW, 1.05-3-0.25 SLT |

## ■ SPEAKER LIST

DESCRIPTIONで判断できない物は “REFERENCE NAME LIST” を参照してください。
If can't understand for Description please kindly refer to “REFERENCE NAME LIST”.

| REF. NO | PART NO. | ｶﾝﾘ NO. | DESCRIPTION |
|---|---|---|---|
| === SX-FN520 === | | | |
| 1 | 83-NS5-001-010 | | PANEL FR |
| 2 | 83-NS5-013-010 | | ADAPTOR ASSY |
| 3 | 83-NS5-005-010 | | SPEAKER GRILL |
| 4 | 83-NSF-602-010 | | SPEAKER WOOFER |
| 5 | 83-NS5-604-010 | | SPEAKER MID |
| 6 | 83-NS5-606-010 | | SPEAKER |
| 7 | 83-NS5-021-010 | | GRILL FRAME ASSY |
| 8 | 83-NS5-611-010 | | SPEAKER CORD Y/B |
| 9 | 83-NS5-612-010 | | TERMINAL Y/B |
| 10 | 83-NS5-613-010 | | SPEAKER CORD ASSY |

## ■ ACCESSORIES／PACKAGE LIST

DESCRIPTIONで判断できない物は “REFERENCE NAME LIST” を参照してください。
If can't understand for Description please kindly refer to “REFERENCE NAME LIST”.

| REF. NO | PART NO. | ｶﾝﾘ NO. | DESCRIPTION |
|---|---|---|---|
| 1 | 83-NFF-903-010 | | IB, H(S)〈HE, HR, LH〉 |
| 1 | 83-NF5-913-010 | | IB, HM(J)〈HM〉 |
| 2 | 83-NFF-605-010 | | RC, RC-TN520EX |
| 3 | 87-006-225-010 | | AM LOOP ANT NC2〈LH〉 |
| 3 | 87-006-240-010 | | AM LOOP ANT CON(KO)〈HE, HM, HR〉 |
| 4 | 87-009-724-010 | | PLUG, ADPTR IR39〈LH〉 |
| 4 | 87-009-725-010 | | PLUG, ADPTR IR40〈HE, HM, HR〉 |
| 5 | 87-043-095-010 | | 5M(SW)WIRE-ANT(S)〈HE, HM, HR〉 |
| 6 | 87-043-115-010 | | ANT, FEEDER FM |

# REFERENCE NAME LIST

## ELECTRICAL SECTION

| DESCRIPTION | REFERENCE NAME |
|---|---|
| ANT | ANTENNAS |
| C- | CHIP |
| C-CAP | CAP, CHIP |
| C-CAP TN | CAP, CHIP TANTALUM |
| C-COIL | COIL, CHIP |
| C-DI | DIODE, CHIP |
| C-DIODE | DIODE, CHIP |
| C-FET | FET, CHIP |
| C-FOTR | FILTER, CHIP |
| C-JACK | JACK, CHIP |
| C-LED | LED, CHIP |
| C-RES | RES, CHIP |
| C-SFR | SFR, CHIP |
| C-SLIDE SW | SLIDE SWITCH, CHIP |
| C-SW | SWITCH, CHIP |
| C-TR | TRANSISTOR, CHIP |
| C-VR | VOLUME, CHIP |
| C-ZENER | ZENER, CHIP |
| CAP, CER | CAP, CERA-SOL |
| CAP, E | CAP, ELECT |
| CAP, M/F | CAP, FILM |
| CAP, TC | CAP, CERA-SOL |
| CAP, TC-U | CAP, CERA-SOL SS |
| CAP, TN | CAP, TANTALUM |
| CERA FIL | FILTER, CERAMIC |
| CF | FILTER, CERAMIC |
| DL | DELAY LINE |
| E/CAP | CAP, ELECT |
| FILT | FILTER |
| FLTR | FILTER |
| FUSE RES | RES, FUSE |
| MOT | MOTOR |
| P-DIODE | PHOTO DIODE |
| P-SNSR | PHOTO SENSER |
| P-TR | PHOTO TRANSISTOR |
| POLY VARI | VARIABLE CAPACITOR |
| PPCAP | CAP, PP |
| PT | POWER TRANSFORMER |
| PTR, RES | PTR, MELF |
| RC | REMOTE CONTROLLER |
| RES NF | RES, NON-FLAMMABLE |
| RESO | RESONATOR |
| SHLD | SHIELD |
| SOL | SOLENOID |
| SPKR | SPEAKER |
| SW, LVR | SWITCH, LEVER |
| SW, RTRY | SWITCH, ROTARY |
| SW, SL | SWITCH, SLIDE |
| TC CAP | CAP, CERA-SOL |
| THMS | THERMISTOR |
| TR | TRANSISTOR |
| TRIMMER | CAP, TRIMMER |
| TUN-CAP | VARIABLE CAPACITOR |
| VIB, CER | RESONATOR, CERAMIC |
| VIB, XTAL | RESONATOR, CRYSTAL |
| VR | VOLUME |
| ZENER | DIODE, ZENER |
| ｻｰｼﾞｻﾌﾟﾚｯｻ | SERGESUPPRESSOR |
| ｾﾗｺﾝ | CAP, CERA |

| サービス技術ニュース | |
|---|---|
| 番号 | 連絡内容 |
| G－　－ | |
| G－　－ | |
| G－　－ | |

## MECHANICAL SECTION

| DESCRIPTION | REFERENCE NAME |
|---|---|
| ADHESHIVE | SHEET ADHESHIVE |
| AZ | AZIMUTH |
| BAR-ANT | BAR-ANTENNA |
| BAT | BATTERY |
| BATT | BATTERY |
| BRG | BEARING |
| BTN | BUTTON |
| CAB | CABINET |
| CASS | CASSETTE |
| CHAS | CHASSIS |
| CLR | COLLAR |
| CONT | CONTROL |
| CRSR | CURSOR |
| CU | CUSHION |
| CUSH | CUSHION |
| DIR | DIRECTION |
| DUBB | DUBBING |
| FL | FRONT LOADING |
| FLY-WHL | FLYWHEEL |
| FR | FRONT |
| FUN | FUNCTION |
| G-CU | G-CUSHION |
| HDL | HANDOL |
| HIMERON | CLOTH |
| HINGE, BAT | HINGE, BATTERY |
| HLDR | HOLDER |
| HT-SINK | HEAT SINK |
| IB | INSTRUCTION BOOKLET |
| IDLE | IDLER |
| IND, L-R | INDICATOR, L-R |
| KEY, CONT | KEY, CONTROL |
| KEY, PRGM | KEY, PROGRAM |
| KNOB, SL | KNOB, SLIDE |
| LBL | LABEL |
| LID, BATT | LID, BATTERY |
| LID, CASS | LID, CASSETTE |
| LVR | LEVER |
| P-SP | P-SPRING |
| PANEL, CONT | PANEL, CONTORL |
| PANEL, FR | PANEL, FRONT |
| PRGM | PROGRAM |
| PULLY, LOAD MO | PULLY, LOADING MOTOR |
| RBN | RIBBON |
| S- | SPECIAL |
| SEG | SEGMENT |
| SH | SHEET |
| SHLD-SH | SHIELD-SHEET |
| SL | SLIDE |
| SP | SPRING |
| SP-SCREW | SPECIAL-SCREW |
| SPACER, BAT | SPACER, BATTERY |
| SPR | SPRING |
| SPR-P | P-SPRING |
| SPR-PC-PUSH | P-SPRING, C-PUSH |
| T-SP | T-SPRING |
| TERM | TERMINAL |
| TRIG | TRIGGER |
| TUN | TUNING |
| VOL | VOLUME |
| W | WASHER |
| WHL | WHEEL |
| WORM-WHL | WORM-WHEEL |
| ｼｸｱｰﾑ | ARM, SHAFT |
| ｼｸｶﾞｲﾄﾞ | GUIDE, SHAFT |
| ｽﾄﾗｯﾌﾟ | STRAP |
| ﾄｸﾅﾍﾞ | S-SCRW |
| ﾋﾝｼﾞ | HINGE |
| ﾋﾝｼﾞﾋﾞｽ | S-SCRW |
| ﾋﾞｽｾﾚｰﾄ | SCRW, SERRART |


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